



User Manual

VOS-ARM

Version: 1.0.3

[Date: 05-May-2014]

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1. Product Overview

GV OS is an Embedded Operating System for ARM Motherboard developed by VXL Instruments. This OS is designed for Embedded Terminals. For e.g., Thin clients, Network terminals, Information appliances, Media appliances, POS terminals, Kiosk, any Desktop appliances & Headless appliances.

GV OS Flash provides features of Network & Connectivity Protocols, Local Window Manager, Local Configuration & Management Utilities, Local productivity & Media applications, Communication & Messaging applications, Office document applications, Internet browser with JVM, Provision for legacy clients, Customized applications.

2. Update License

When user boot up the system for the first time, it will display a message “License not available. Do you wish to update license now?”



To update a license click on “yes” button. After this, the following window will invoke.

System Unique ID -> 00:60:72:30:75:76

Method: Local (dropdown menu)

Network Mode : DHCP

IP Address: []

Username: []

Password: []

Filepath: usb (dropdown menu)

Buttons: Update (with checkmark), Close (with X)

There are three methods for updating license (USB, HTTP and FTP). User can use one of these three methods. User can configure network settings manually or using DHCP. The three methods are as follows:

1. USB Update

1. Copy the license file in the USB Drive.
2. Select USB in Method option.
3. Input license file name in File path.
4. Click on Update button.
5. After updating license, system will reboot automatically.

System Unique ID -> 00:60:72:28:02:90

Method: Local (dropdown menu)

Network Mode : DHCP

IP Address: []

Username: []

Password: []

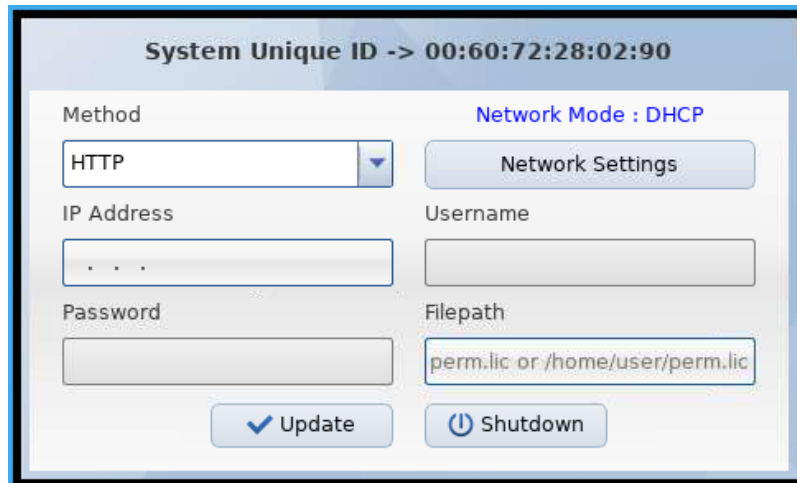
Filepath: smb (dropdown menu)

Buttons: Update (with checkmark), Shutdown (with power icon)

2. HTTP Update

1. Select HTTP in Method option.
2. Input server IP address and File path.

3. Click on Update button.
4. After updating license, system will reboot automatically.



The screenshot shows a configuration window titled "System Unique ID -> 00:60:72:28:02:90". The window contains the following fields and buttons:

- Method:** A dropdown menu currently set to "HTTP".
- Network Mode:** Displayed as "DHCP" in blue text.
- Network Settings:** A button located to the right of the Method dropdown.
- IP Address:** A text input field containing three dots "..."
- Username:** An empty text input field.
- Password:** An empty text input field.
- Filepath:** A text input field containing the text "perm.lic or /home/user/perm.lic".
- Update:** A button with a checkmark icon and the text "Update".
- Shutdown:** A button with a power icon and the text "Shutdown".

3. FTP Update

1. Select FTP in Method option.
2. Input server IP address, User name, and Password and File path.
3. Click on Update button.
4. After updating license, system will reboot automatically.

System Unique ID -> 00:60:72:28:02:90

Method: FTP Network Mode : DHCP

IP Address: ... Username:

Password: Filepath: perm.lic or /home/user/perm.lic

✓ Update ⏻ Shutdown

3. Configuration Wizard

User can configure settings automatically or manually or import settings.

- In Automatic option, the defaults settings are set automatically after the timeout.

Configuration Wizard

Version: GV-1.0.4 Build: K65-GV-3.0-01-001-404-STD

Configure Settings

☒ Automatically
☐ Manually
☐ Import

12sec

Settings will be configured with default settings

← → ✓ Finish

- In manual option, user can change settings according to his requirements.
The following are configuration settings.



3.1. Configuration Wizard- Language

User can select default Language for the system from dropdown selection box.



3.2. Configuration Wizard- Keyboard

User can select a Keyboard Type for the system.



3.3. Configuration Wizard- User Interface

User can select either Kiosk or Desktop user interface mode for the system.



3.4. Configuration Wizard- Display

User can select Resolution, Refresh Rate and Color Depth for the system. Driver would be Mali for k54 mother board.

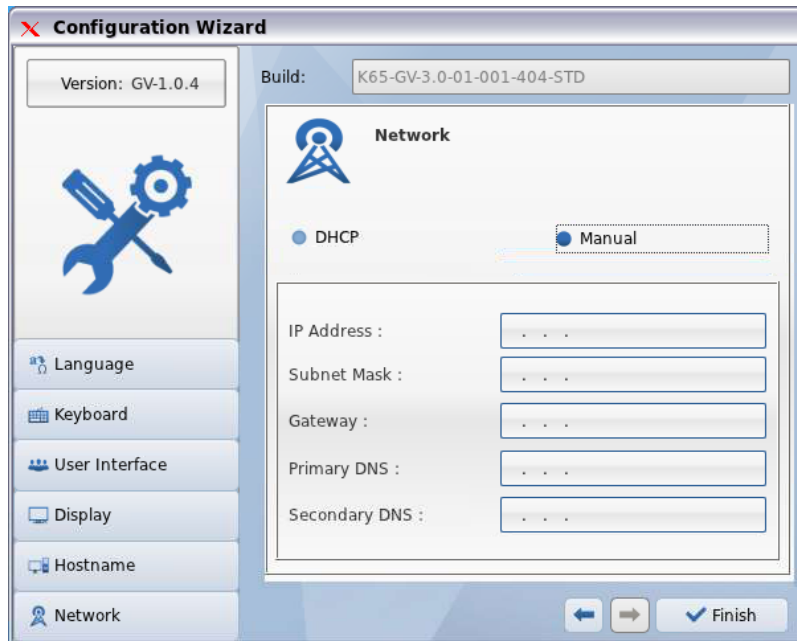


3.5. Configuration Wizard- Host name

User can set the Hostname and Domain for the system.

3.6. Configuration Wizard- Network

User can select the network device to connect to the Local Area Network or Internet, Ethernet. User can choose to obtain network settings from DHCP or can set it manually. This is the last step of the configuration wizard. When user clicks on Finish button, the system will reboot after this process. After reboot, the changes will be applied to the system.



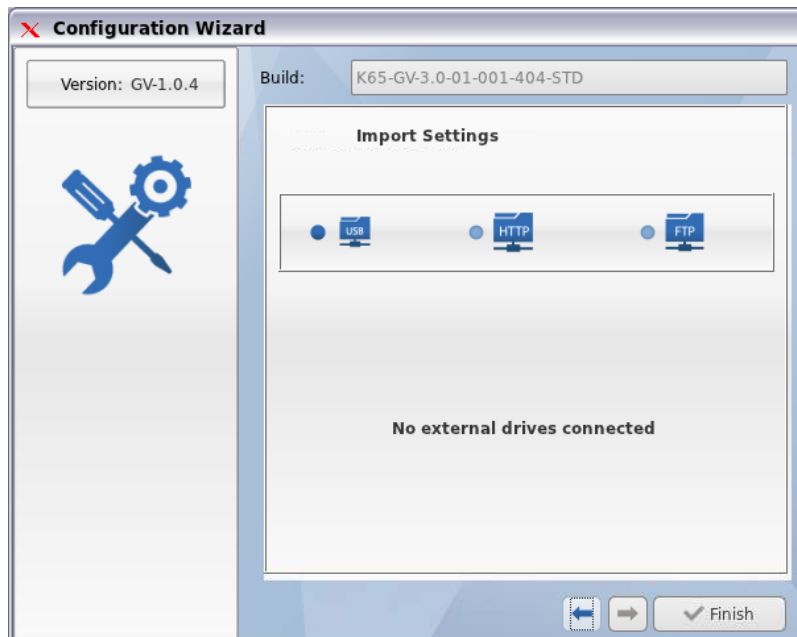
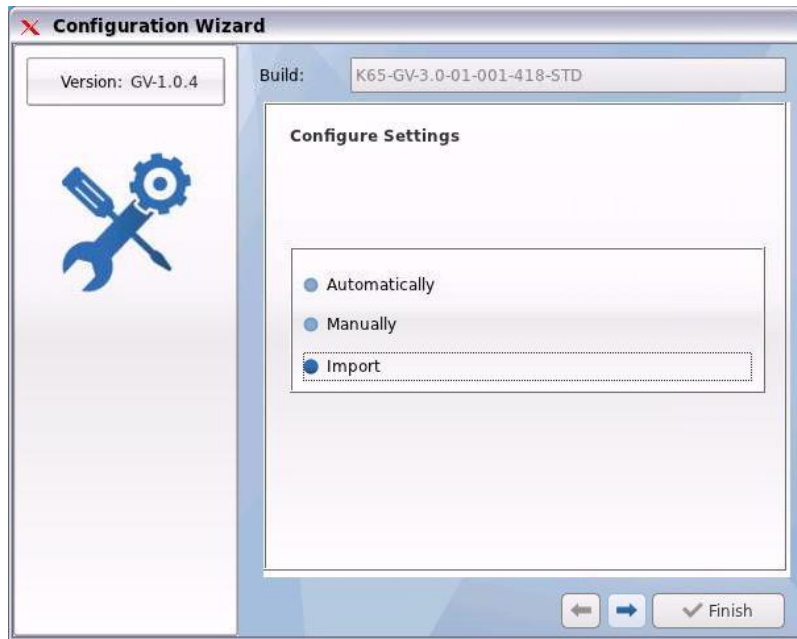
After clicking on finish, System will reboot and boot with the above configuration settings.

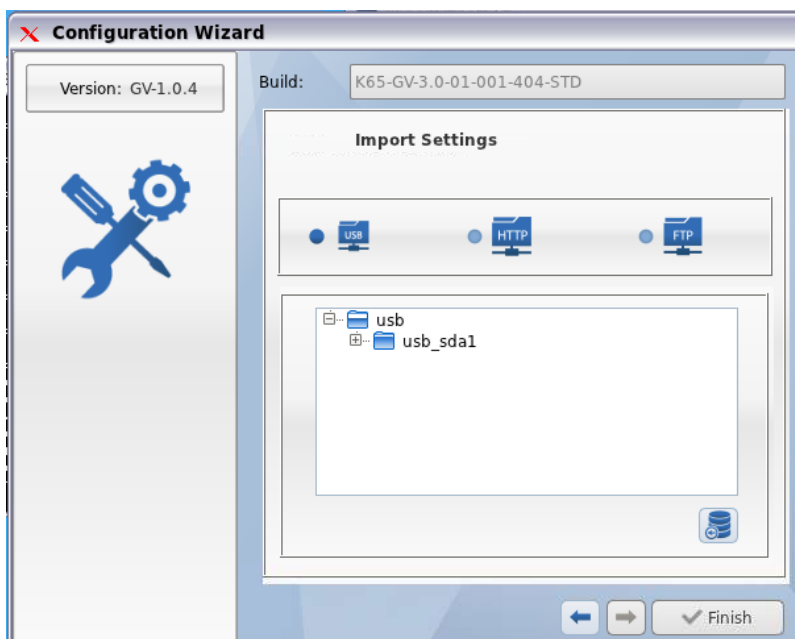
3.7. Import

User can Import all the configuration settings from already saved configuration file using USB, HTTP and FTP methods.

USB: Import all settings from USB pen drive.

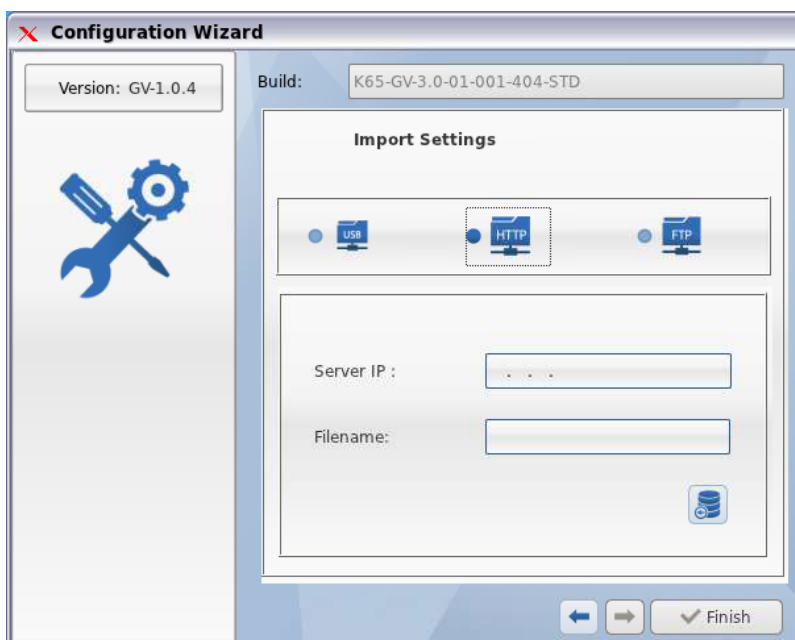
- Select Import option.
- Select USB.
- Select path from USB Pen drive.
- Select settings file from the list of files.
- Click on Import button.





HTTP: Import all settings from HTTP Server.

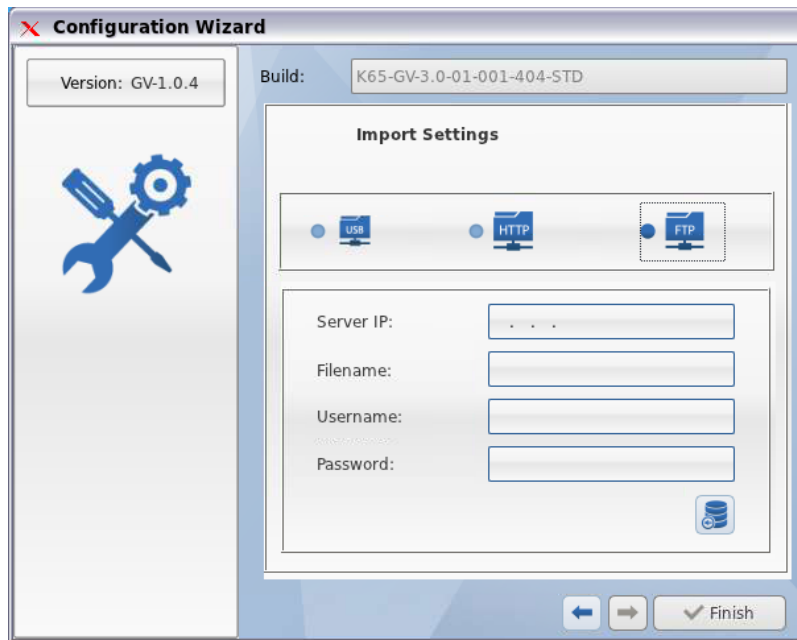
- Select Import option.
- Select HTTP method.
- Enter HTTP Server IP.
- Enter filename.
- Click on Import button.



FTP: Import all settings from FTP Server.

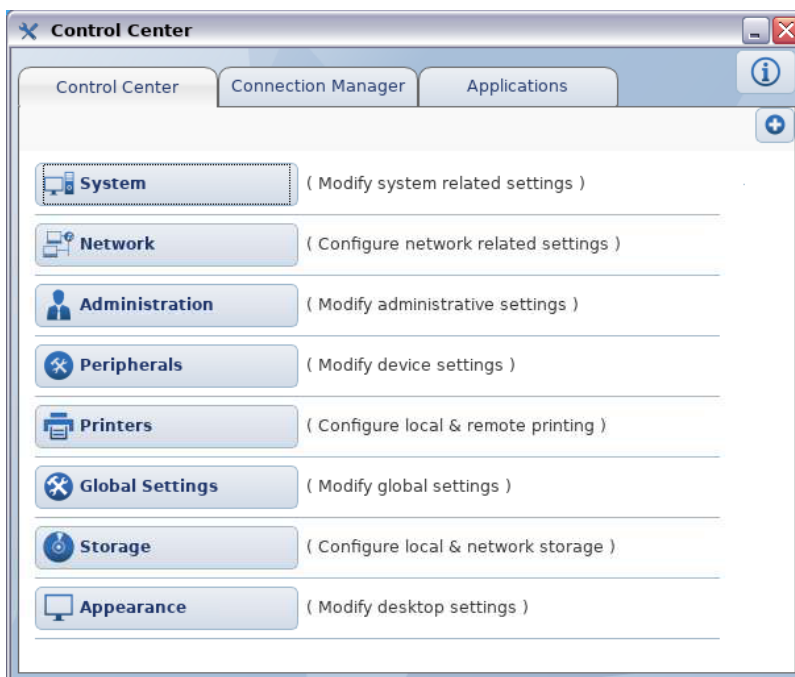
- Select Import option.
- Select FTP method.

- Enter IP address of FTP Server.
- Enter Filename.
- Enter Username & Password of FTP Server.
- Click on Import button.



4. Control Center

User can view and edit general system settings and system information from TC Control Manager. It has 8 Options to change the settings of TC which are explored below.



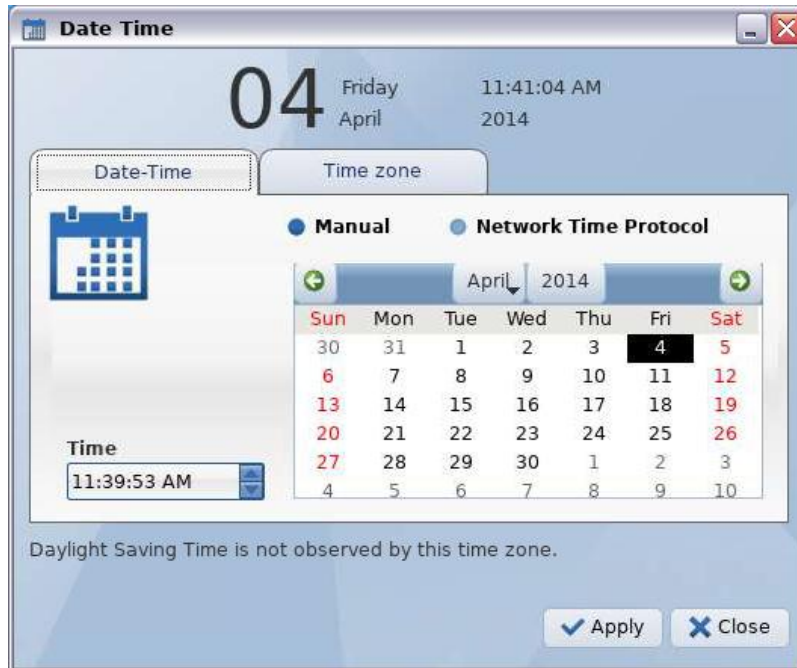
4.1. System

Through System Tab user can configure and view all the system related settings. System tab contains Date-Time, Fonts, Language, Shutdown Procedure, Tools. Using this tab you can change system's setting. All system settings are described below:



4.1.1. Date-Time

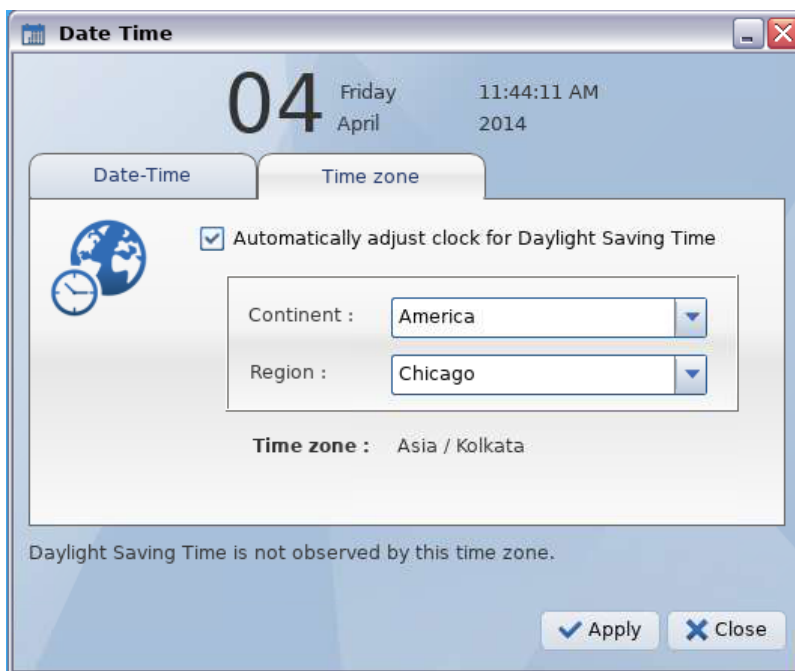
By using this tab, User can set Date-time.



For synchronizing time on systems through network protocols, enable the option Network Time Protocol and select the server i.e. NTP Timeserver OR NTP Through DHCP Server.

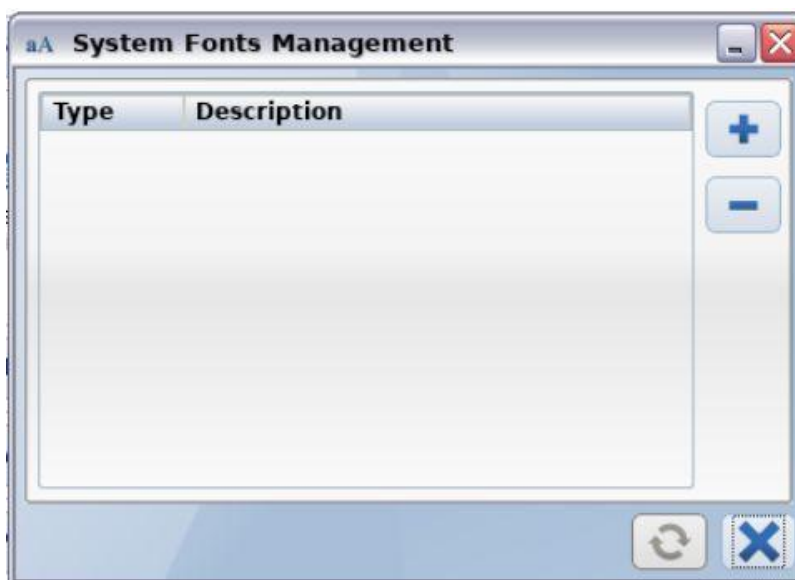


Time zone tab shows Continent and Region. Select appropriate time zone according to your requirement. For Day light saving, enable "Automatically adjust clock for Daylight Saving Time".



4.1.2. Fonts

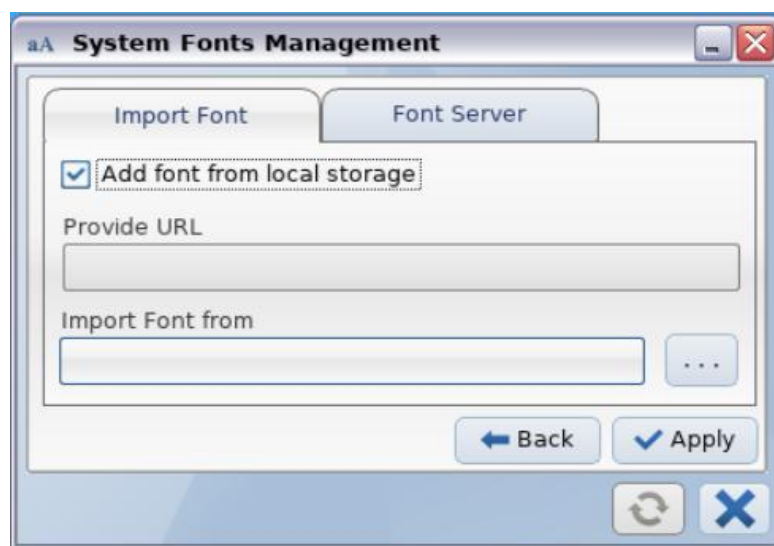
Font's option enables you to add fonts locally using storage devices like SMB, NFS, USB and URL.



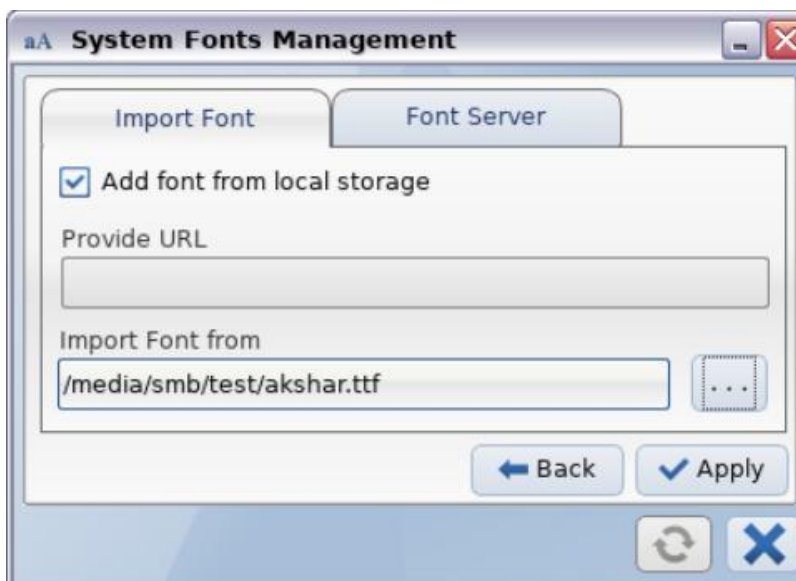
Adding Fonts:



Adding Fonts locally from local storage:

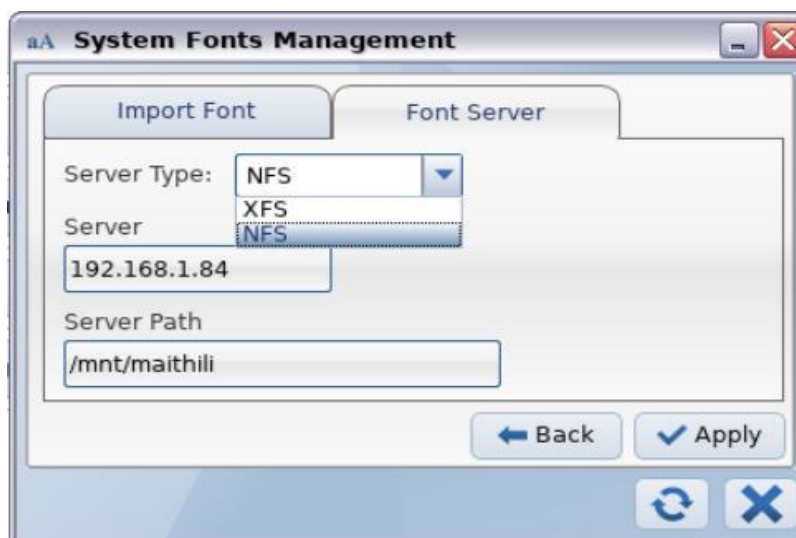


Browse the Font files from local storage and Click on Apply button, setting will be applied after restart.

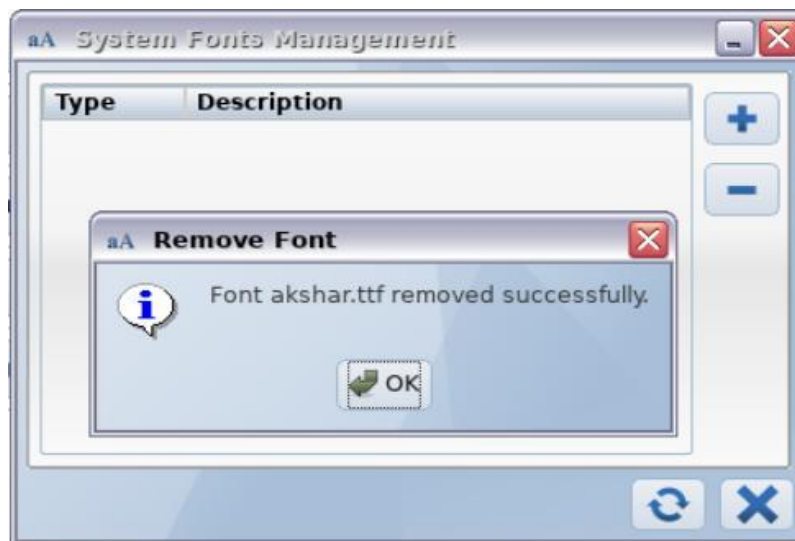
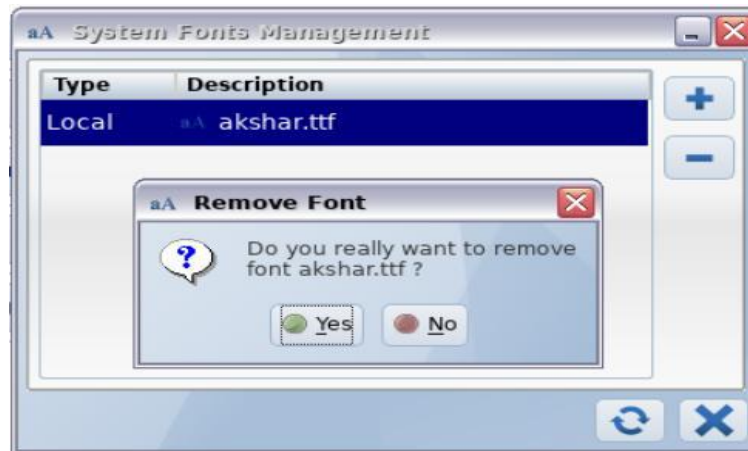


Adding fonts from Font Server:

Select the server type (XFS/NFS), enter the IP of that server, path and click on apply button.



To delete existing fonts:



Adding Fonts locally from URL:

Input URL and Click on Apply button, settings will be applied after restart.



4.1.3. Language

By using this tab User can change language of TC. User can also change Keyboard Settings by enabling the “Change Keyboard Layout” option from this tab.

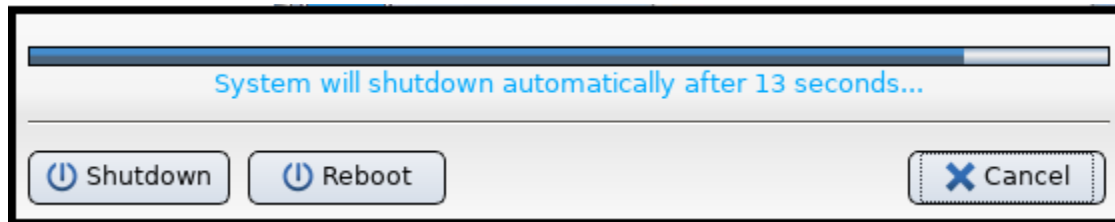


4.1.4. Power Options

User can change Shutdown Procedure to Prompt User, Shutdown or Reboot.



Below image shows scenario for Prompt User



4.1.5. Tools

Tools tab consist of System Tools, Network Tools & Logs.

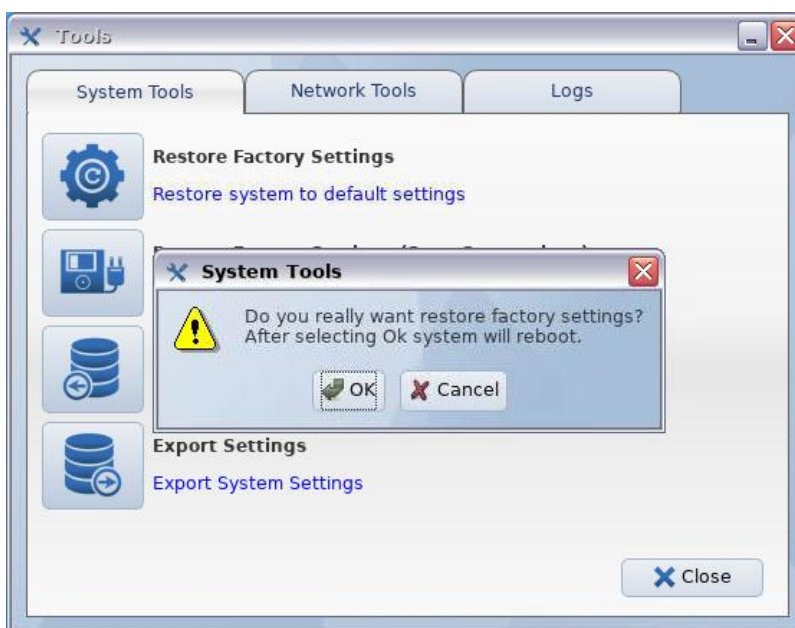
4.1.5.1. System Tools

System Tools tab consist of System related settings, like Restore Factory Settings, Restore Factory Settings (Save Connection), Import Settings and Export Settings.



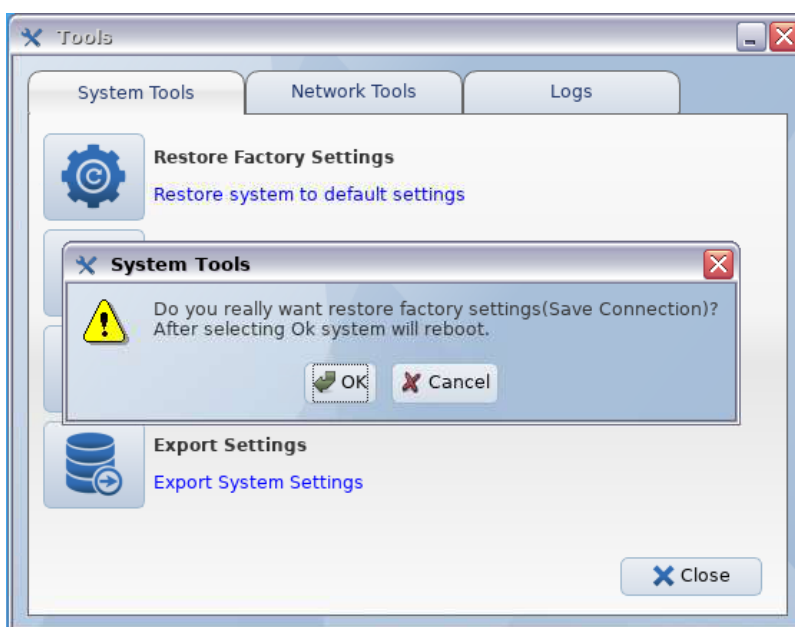
Restore Factory Settings:

It restores the system to default settings and the changes and configuration done, will get vanished.



Restore Factory Settings (Save Connection):

It restores the system to default setting but connections and connections related settings remain saved.



Import Settings:

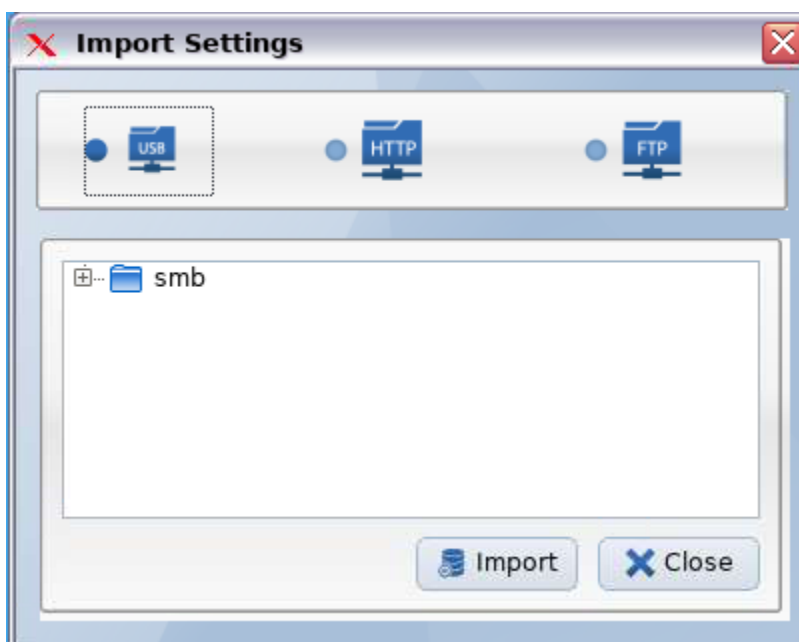
User can import the entire configuration settings from already saved configuration file. User can use the USB, Network mounted drives, HTTP Server or FTP Server for importing.

USB: Import all settings from USB.

- Select import option.
- Select USB.
- Select path from USB Pen drive/SMB/NFS.

- Select settings file from the list of files.
- Click on Import button.

Note: Similarly User can import settings from SMB and NFS storages.



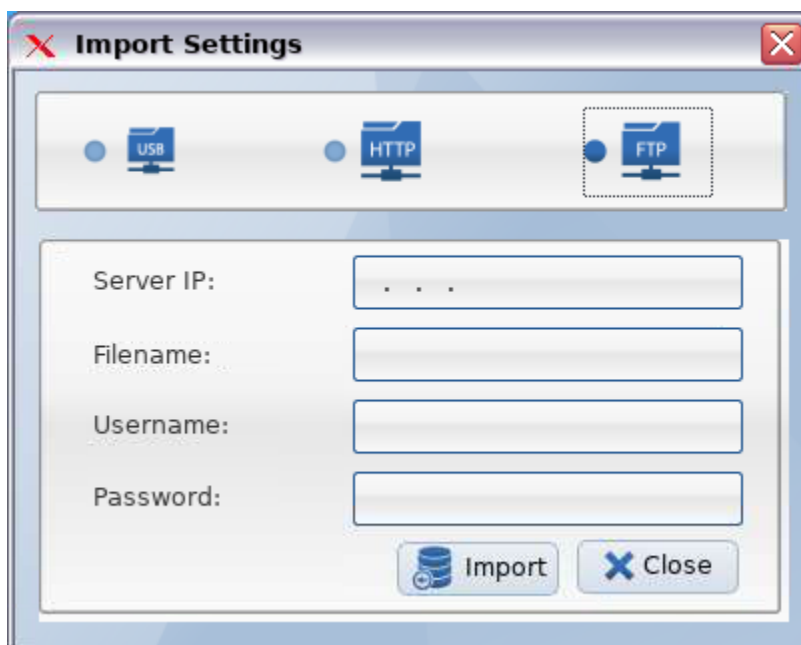
HTTP: Import all settings from HTTP Server.

- Select Import options.
- Select HTTP.
- Enter HTTP Server IP.
- Enter Filename.
- Click on Import button.



FTP: Import all settings from FTP Server.

- Select import options
- Select FTP.
- Enter IP address of FTP Server.
- Enter Filename.
- Enter Username & Password of FTP Server.
- Click on Import button.

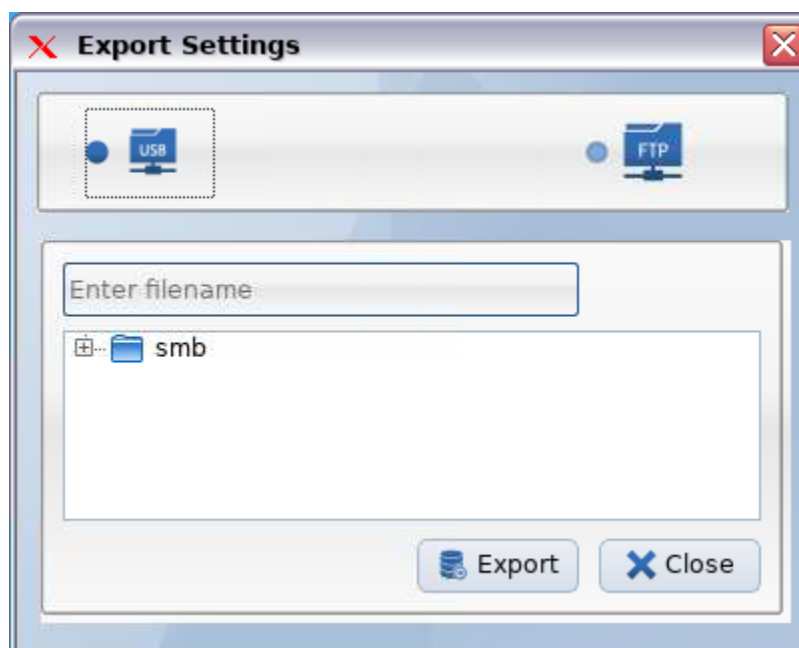


Export Settings:

User can export the entire settings to a file. User can use the USB pen drive and FTP Server.

USB: Export all settings from USB pen drive.

- Select export options.
- Select USB.
- Select path from USB Pen drive/SMB/NFS.
- Select settings file from the list of files.
- Click on Export button.



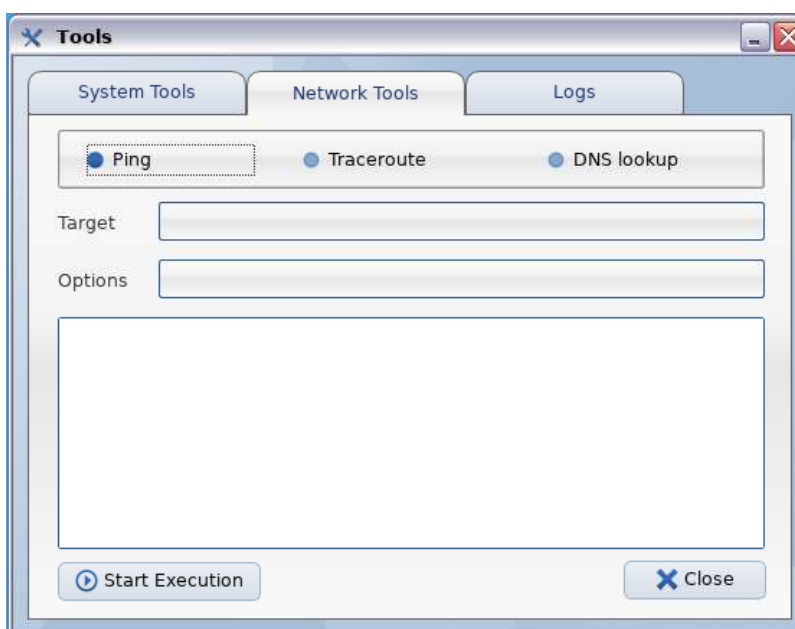
FTP: Export all settings from FTP Server.

- Select export options.
- Select FTP.
- Enter IP address of FTP Server.
- Enter filename.
- Enter Username & Password of FTP Server.
- Click on export button.



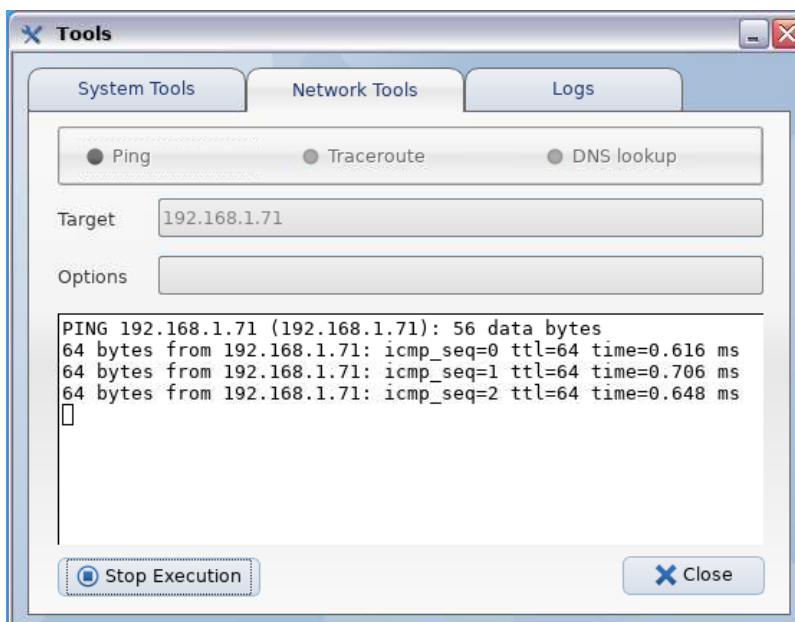
4.1.5.2. Network Tools

Network Tools are to check the Ping and Trace route commands with any IP address or Hostname in the network.



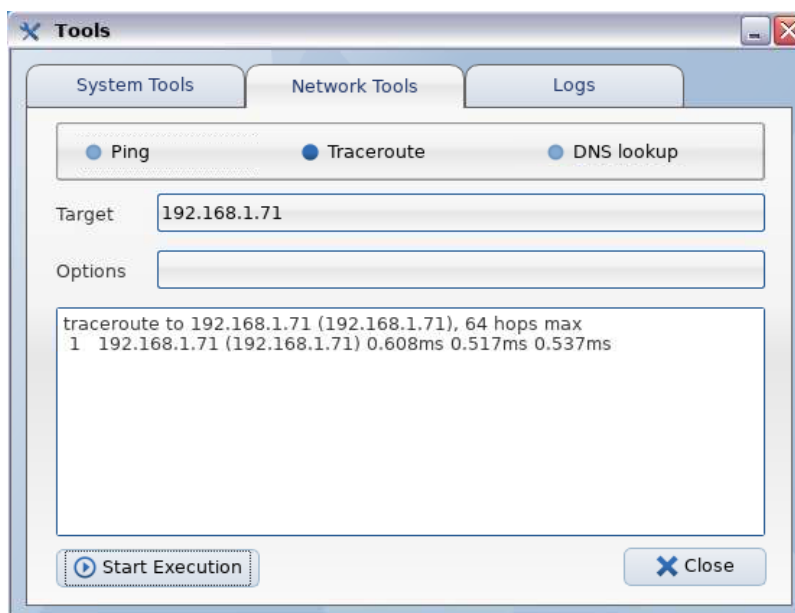
Ping:

- Select Ping option.
- Enter IP address / Host Name.
- Click on Start Execution.



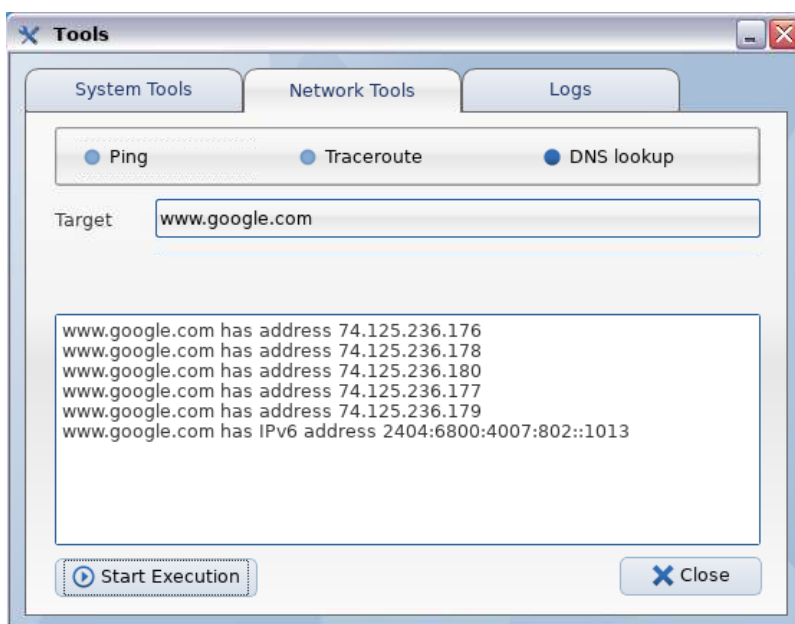
Traceroute:

- Select Traceroute option.
- Enter IP address / Host Name.
- Click on Start Execution.



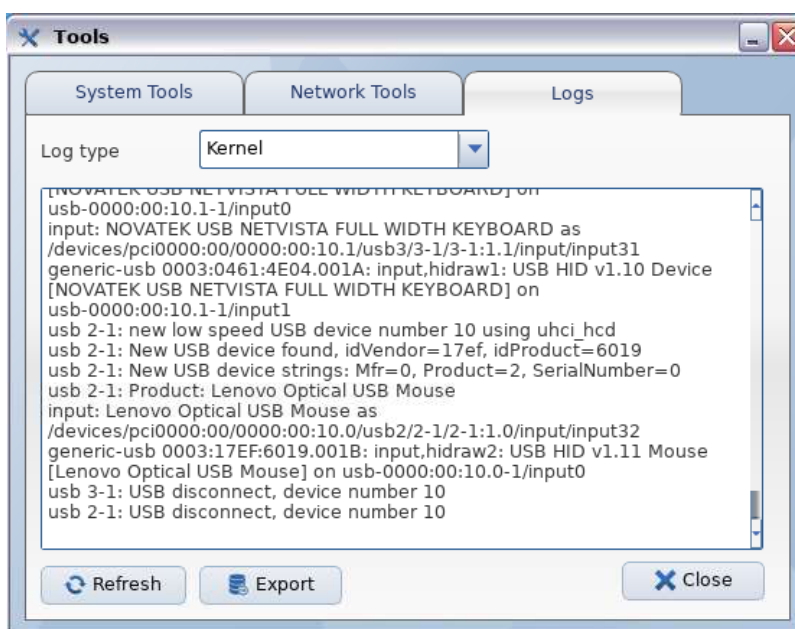
DNS Lookup:

- Select DNS Lookup option.
- Enter IP address / Host Name.
- Click on Start Execution.



4.1.5.3. Logs

User can check Logs of Configuration & Firmware, Kernel, XServer and CUPS .User can export logs in USB or FTP server.



User can export logs in USB or FTP server.

USB:

- Click on USB.
- Select proper path, where user wants to keep the exported file.
- Click on Export button.

**FTP:**

- Click on FTP.
- Enter Server IP.
- Enter Filename.
- Enter Username & Password of FTP Server.
- Click on Export Button.



4.2. Network

4.2.1. Ethernet

Network tab shows you about network settings.



User can configure Ethernet network using this option. User can configure Network Manually or using DHCP server provided data.

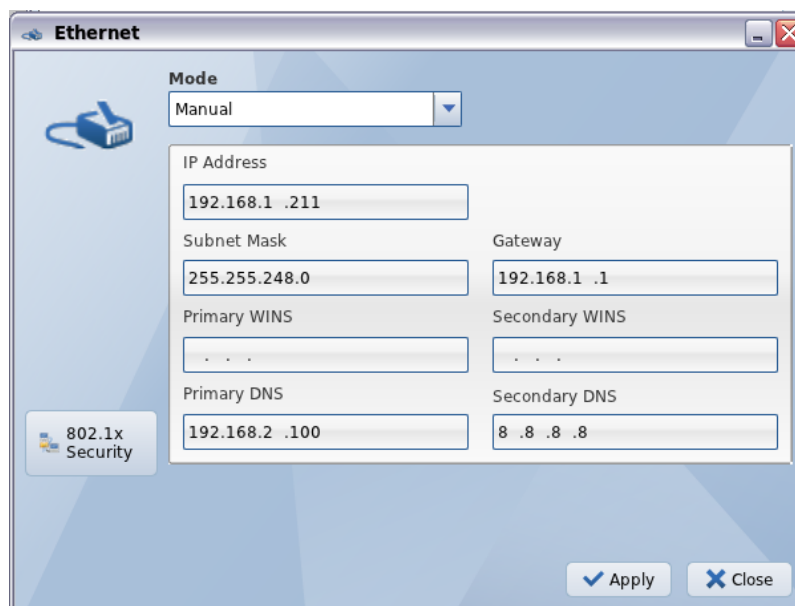
Disable Mode:

User can disconnect the Thinclient from a network by disabling the Ethernet connection. Select Disable option from the list and click on Apply option. The settings will be applied.



Manual Configuration:

User can configure network manually, input IP Address, Subnet Mask, Gateway etc.



Configure Using DHCP:

If you want to configure network using DHCP, use this option.



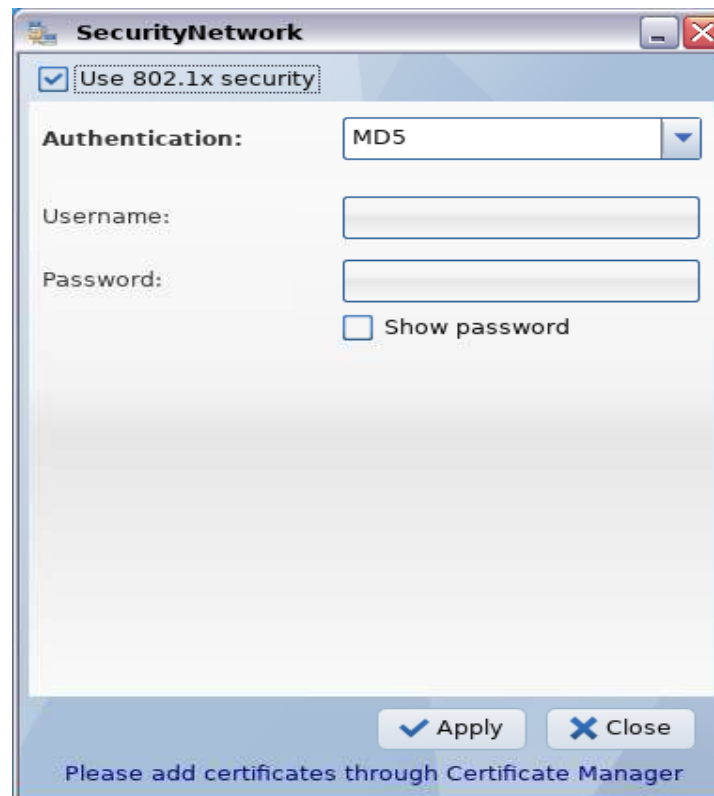
802.1x Security:

802.1x is an IEEE standard for Port based Network Access Control, It has 4 types of authentication:

MD5 Authentication:

MD5 Authentication is one of the type of authentication of 802.1x security network.

- Select Authentication as MD5
- Enter Username.
- Enter Password.
- Click on Apply button.



TLS Authentication:

TLS Authentication is one of the types of authentication of 802.1x security network.

- Select Authentication as TLS
- Enter Identity.
- Enter Password.
- Click on Apply button.



Tunneled TLS Authentication:

Tunneled TLS Authentication is one of the types of authentication of 802.1x security network.

- Select Authentication as Tunneled TLS.
- Enter Identity.
- Enter Username & Password.
- Click on Apply button.

SecurityNetwork

☒ Use 802.1x security

Authentication: Tunneled TLS

Anonymous Identity:

CA certificate:  /

Inner Authentication: PAP

Username:

Password:

☐ Show password

Please add certificates through Certificate Manager

Protected EAP (PEAP):

Protected EAP (PEAP) Authentication is one of the types of authentication of 802.1x security network.

- Select Authentication as Protected EAP (PEAP).
- Enter Anonymous Identity.
- Select CA certificate from drop down.
- Select PEAP version as Version 0.
- Select Inner Authentication as MSCHAPV2.
- Enter Username.
- Enter Password.
- Click on Apply button.



4.2.2. Wireless

User can configure network using the Wireless option i.e. through Wi-Fi.

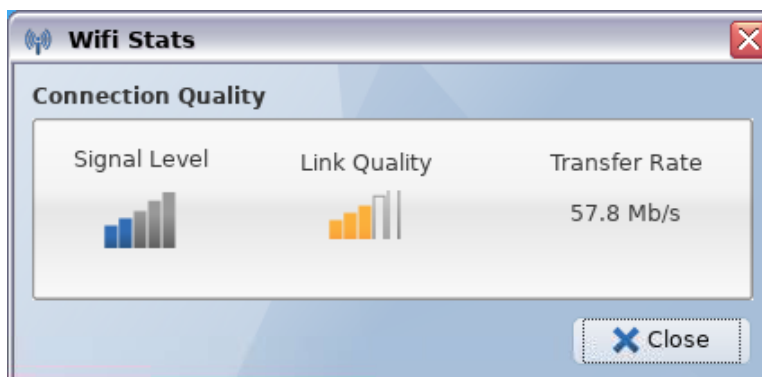
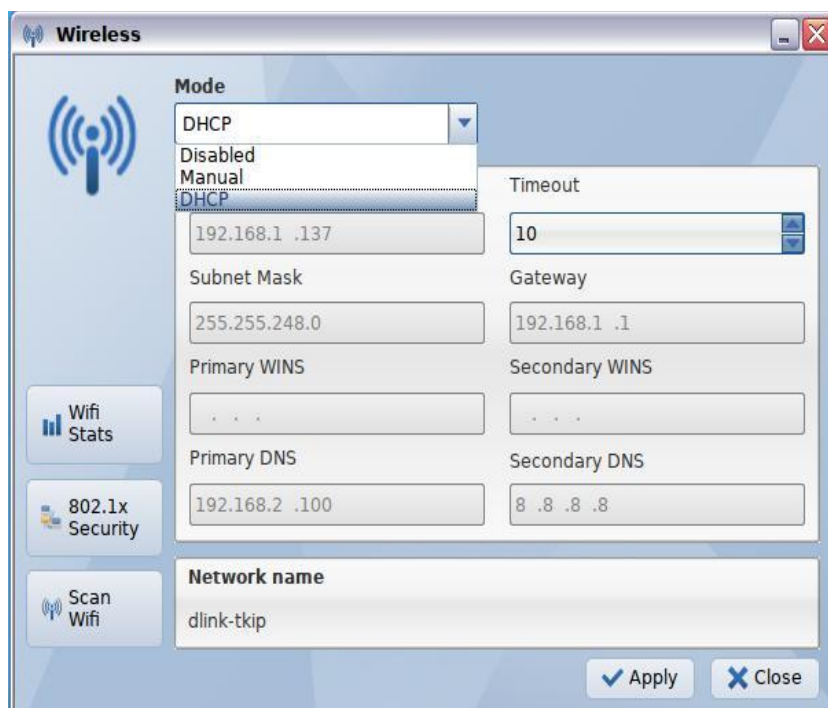
If Wi-Fi device is not connected then it prompts error message.



Follow the below steps to use wireless connection:

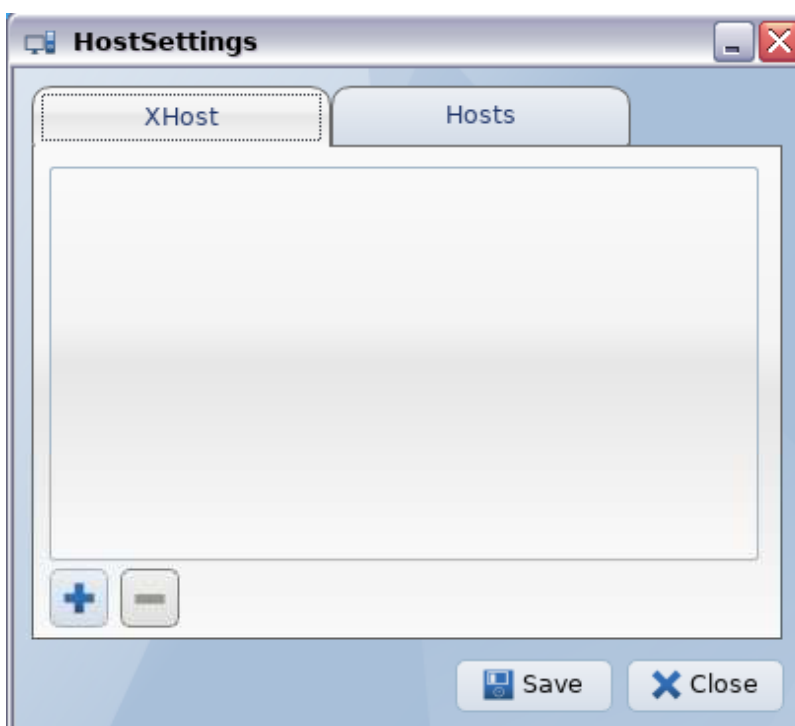
1. Plug Wi-Fi device and invoke wireless option.

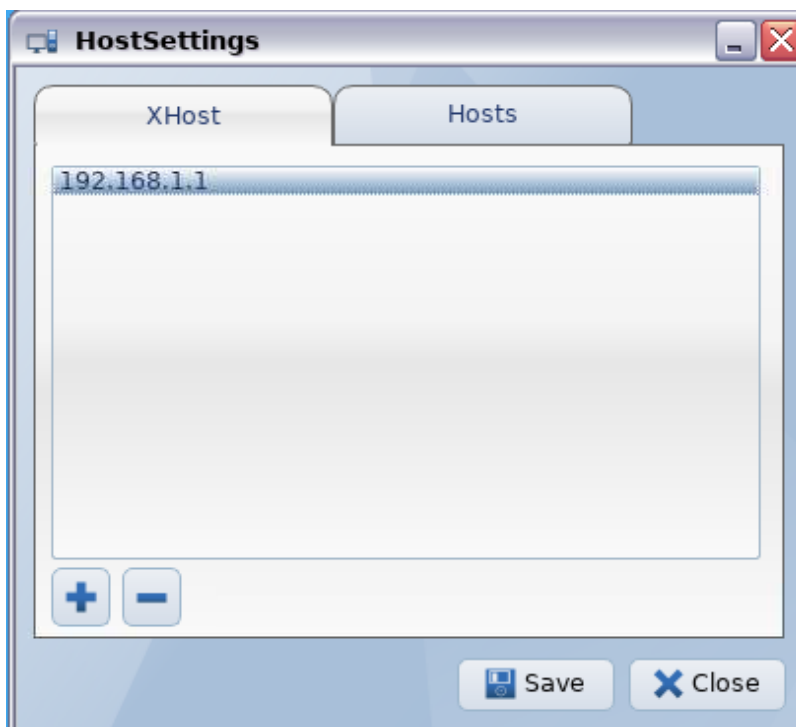
2. Click on Scan Wi-Fi network. Result will show you available wireless networks.
3. Select desired Wi-Fi Network.
4. Select proper Authentication.
5. Input Password.
6. Click on Connect button.



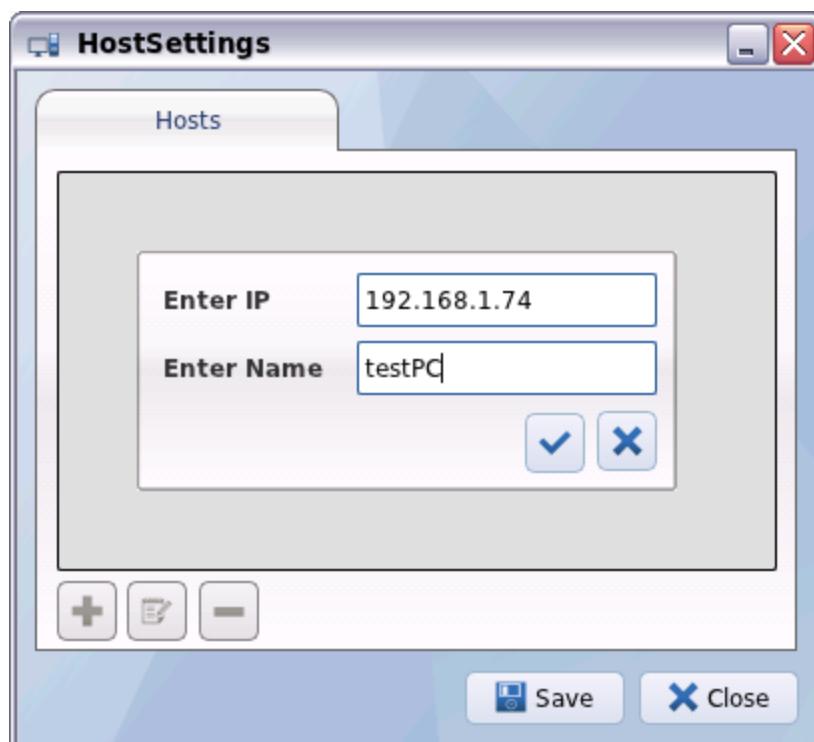
4.2.3. Host/Xhost

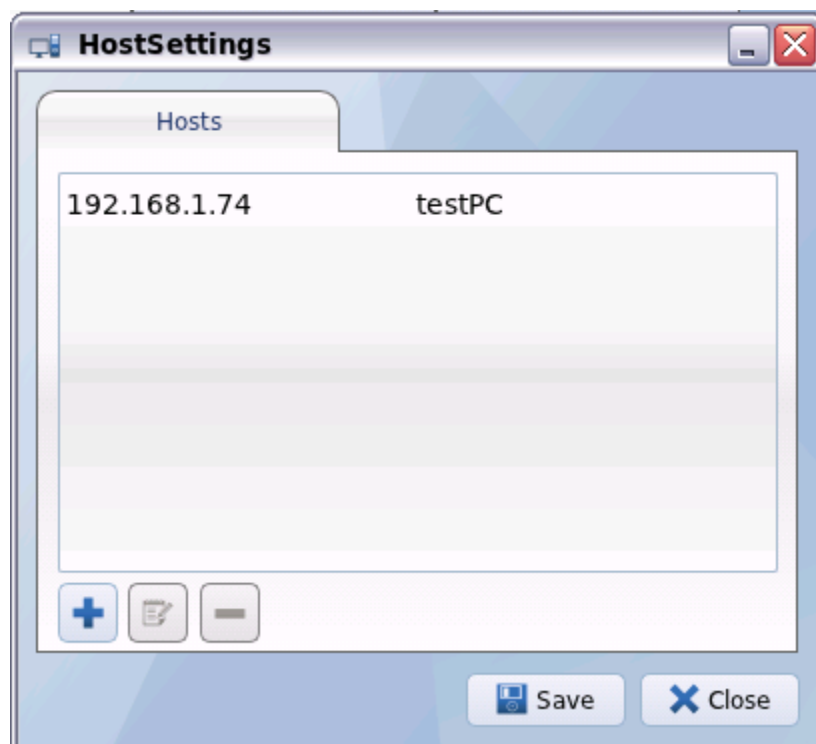
User can add Hosts and xhosts using this tab.



**Hosts:**

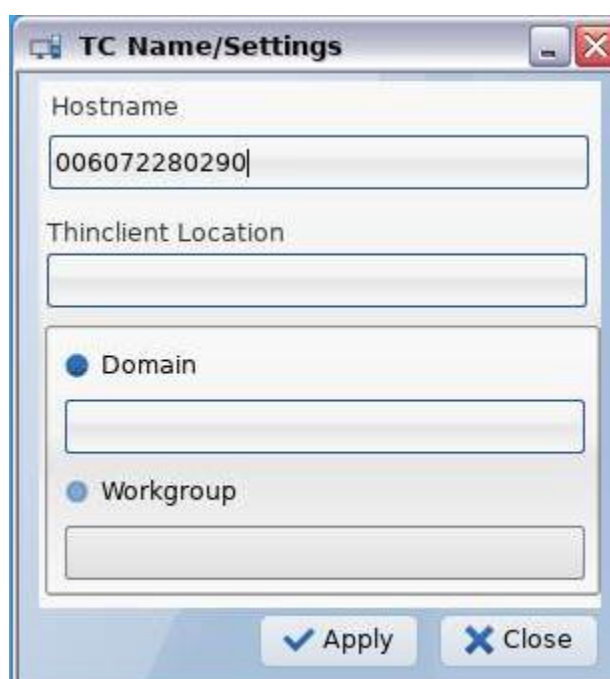
Enter appropriate IP and Name and click on Save to add.





4.2.4. TC Name Settings

User can change the Hostname of the system. User can set Thinclient Location, Domain or Workgroup.



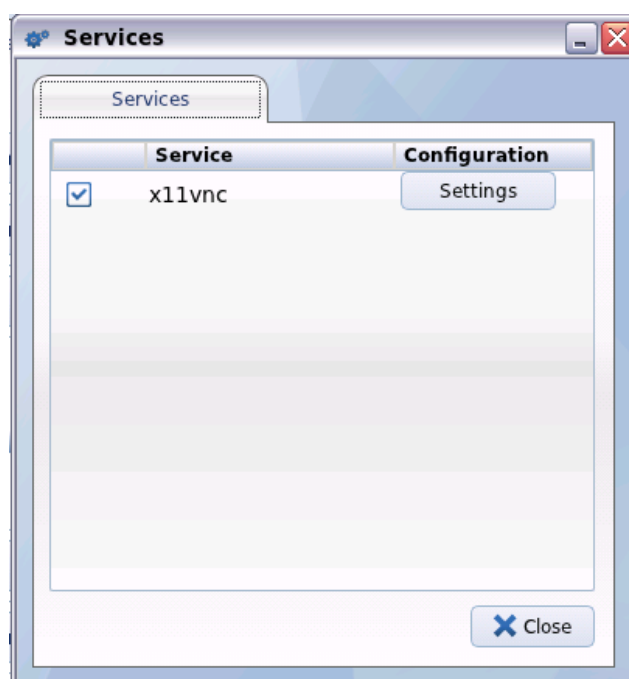
4.3. Administration

User can perform administrative actions using this tab.



4.3.1. Services

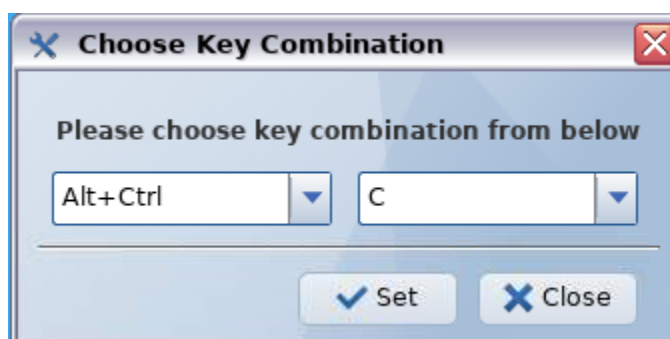
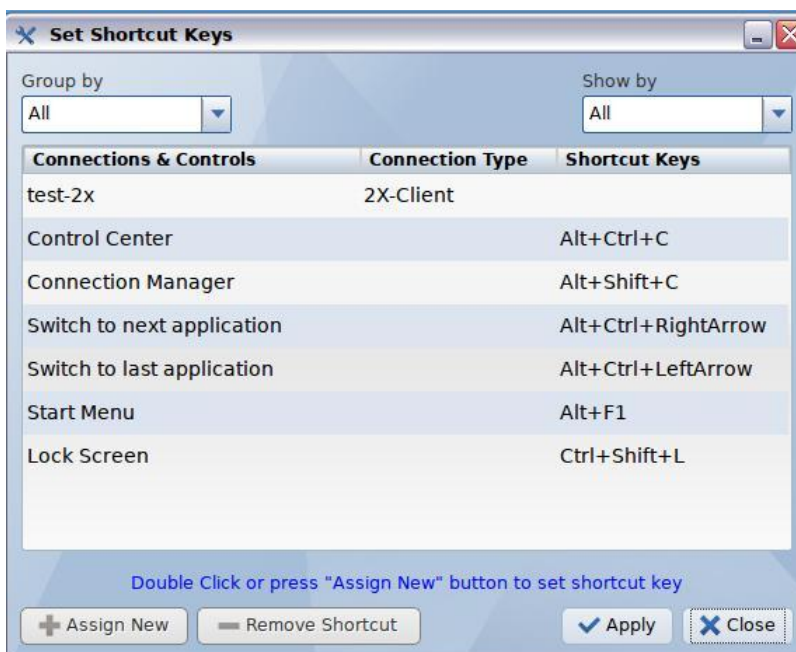
User can Start or Stop services like X11VNC. User can change the VNC settings like Notify Users, Query User, Silently Connect, Password Protected, View Only mode, multiple connections.





4.3.2. Shortcut keys

Shortcut key commands for window navigation for application & for connections can be configured here. User can assign different combination of keys like ALT, SHIFT, CTRL, Arrow Keys and all alphabets for different connections and Control Center and Connection Manager. This will allow user to invoke the assigned options by simply pressing the respective shortcut keys.

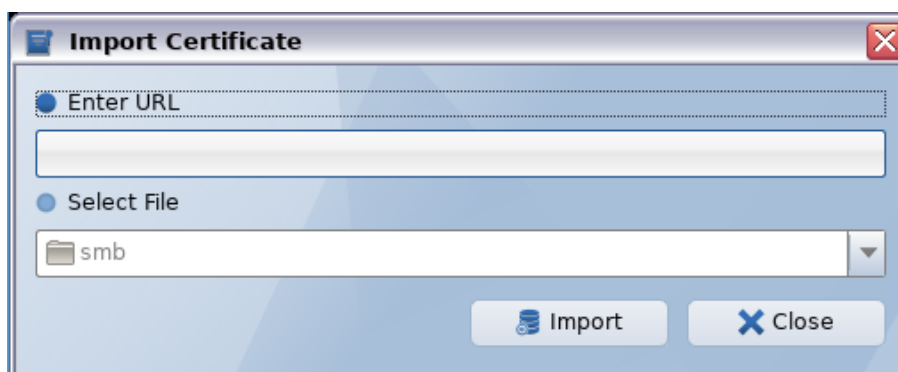


Assign New:

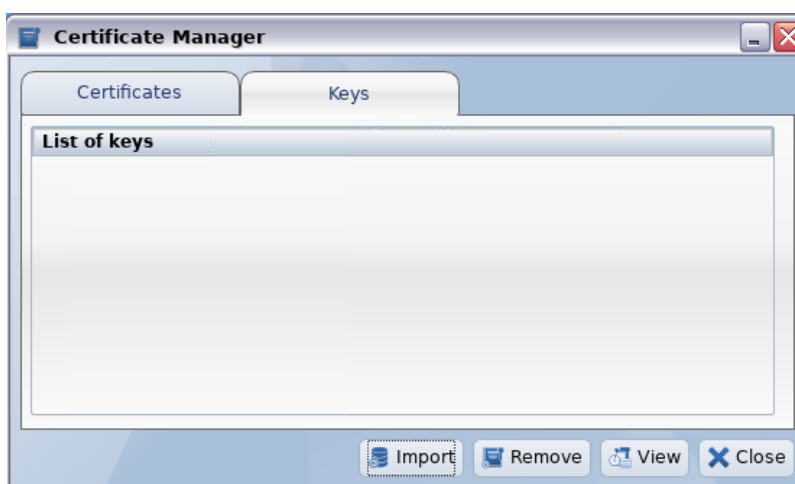
- Select any application / Connection / Control from the list.
- Click on “Assign New” button or double click on a required Connection.
- Select Key or Key Combination from first drop down box. Eg: Ctrl, Alt, Ctrl+Shift, Alt+Ctrl etc.
- Select any Alphabet / Numeric / Arrow keys / Function keys from second drop down box.
- Click on “Set” button.
- Click on “Apply” button.

4.3.3. Certificate Manager

User can add Certificate for websites and web application.



User can add Keys for websites and web application and for connecting servers .



Adding Certificate:

- Click on Import button.
- Enter URL or External Drives.
- Click on Import button.

4.3.4. Authentication

Authentication refers to the process where an entity's identity is authenticated, typically by providing evidence that it holds a specific identity such as valid credentials.

The screenshot shows the 'Authentication' dialog box. At the top, there is a dropdown menu labeled 'Authentication :' with 'Admin' selected. Below this, there is a checkbox labeled 'Change Admin' which is unchecked. Underneath the checkbox are three text input fields: 'Old Admin Password', 'New Admin Password', and 'Reenter New Admin Password'. At the bottom of the dialog, there are three buttons: 'User Access' (with a user icon), 'Apply' (with a checkmark icon), and 'Close' (with an 'X' icon).

Authentication Types:

1. User:

USER has limited access to the thin client. User has limited privileges and access to system-wide resources.

The screenshot shows the 'Authentication' dialog box with 'User' selected in the 'Authentication :' dropdown menu. The main area of the dialog contains a text box with the message: 'If Authentication type is selected as 'User' then user will be logged in system without authentication'. At the bottom, the same three buttons are present: 'User Access', 'Apply', and 'Close'.

2. Admin:

Admin and User access can be managed from this tab. Admin user have full rights. Only Admin has the right to give User rights. Admin password can be changed by enabling the “Change Admin Password” option. Enter old password and new required password and click on Apply button.



The screenshot shows the 'Authentication' dialog box with the 'Admin' tab selected. The 'Authentication' dropdown is set to 'Admin'. Below it, the 'Change Admin Password' checkbox is unchecked. There are three text input fields: 'Old Admin Password', 'New Admin Password', and 'Reenter New Admin Password'. At the bottom, there are three buttons: 'User Access', 'Apply', and 'Close'.

3. ADS:

Active Directory is a Directory Service Provider, where you can add new user to a directory, remove or modify, specify privileges, assign policy etc. For ADS authentication, select ADS from the drop down list. Enter IP address and Domain and click on Test Join. Enter proper credentials and click on Join. For next login ADS authentication will be in use.

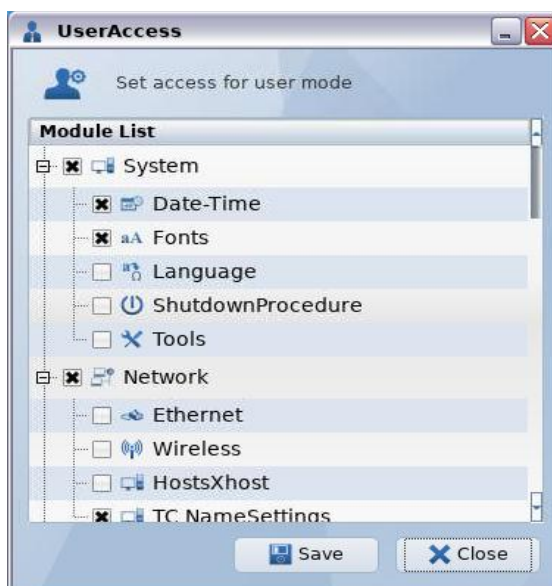


The screenshot shows the 'Authentication' dialog box with the 'ADS' tab selected. The 'Authentication' dropdown is set to 'ADS'. Below it, there are two text input fields: 'Domain' with the value 'vdi.com' and 'OU' with the value 'OU=Verixo, DC=vdi, DC=com'. A 'Test Join' button is located to the right of the 'OU' field. At the bottom, there are three buttons: 'User Access', 'Apply', and 'Close'.



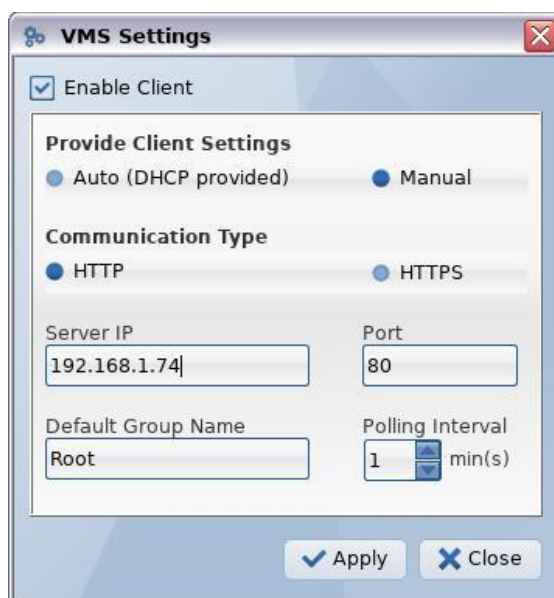
User Access:

By using User access Admin can give rights for the USER mode.



4.3.5 VMS Settings:

VMS Settings is client side configuration to communicate with VMS server i.e. centralized Device Management Suite.



4.4. Peripherals

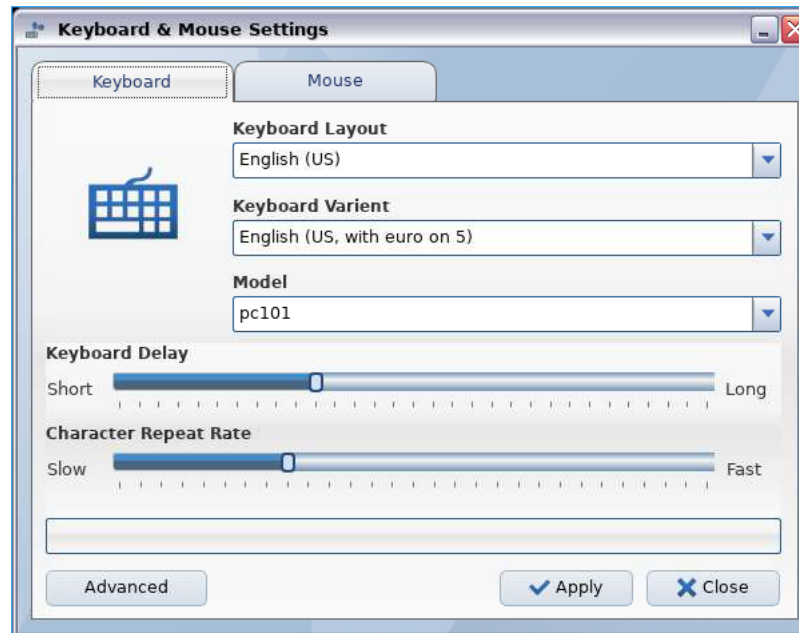
Set your keyboard layout, monitor settings and other input options from this tab. The following parameters can be configured:



4.4.1. Keyboard And Mouse

Keyboard:

By using keyboard setting user can change Keyboard Layout, Keyboard Delay and Character Repeat Rate.



Keyboard Layout:

User can select the Keyboard Type from Keyboard Layout drop down list and apply. The settings will be applied on the fly.

Keyboard Delay:

User can customize how long you must press a key before the keyboard character starts repeating. To select the required value adjust the seek bar and click on apply. The settings will be applied.

Character Repeat Rate:

User can adjust the speed of the characters that repeat on your keyboard. To select the required value adjust the seek bar and click on apply. The settings will be applied.

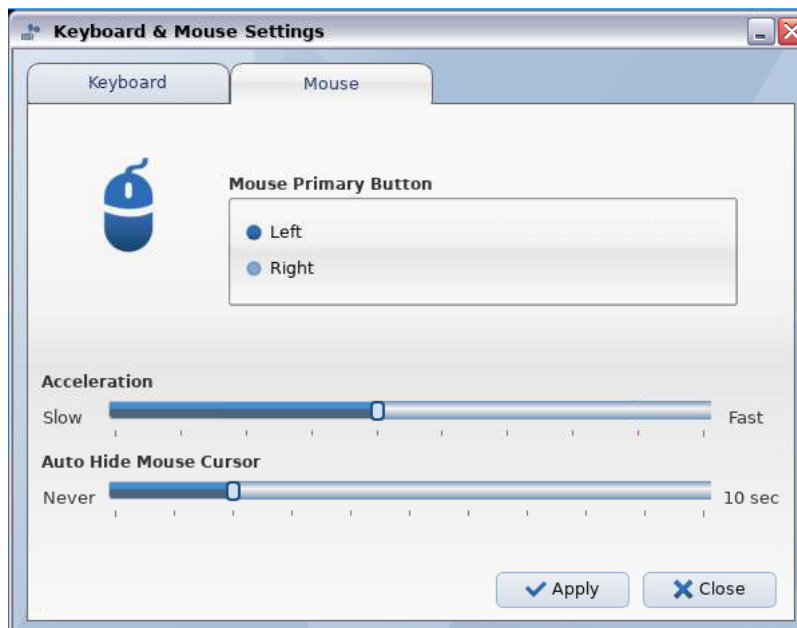
Advanced options:

User can also enable or disable Num lock on boot, Enable Scroll Lock, Right Alt to behave as to Left Alt in the advanced option.



Mouse:

Mouse setting can change Mouse Orientation, Acceleration and Auto Hide Mouse Cursor settings using this tab.



Acceleration:

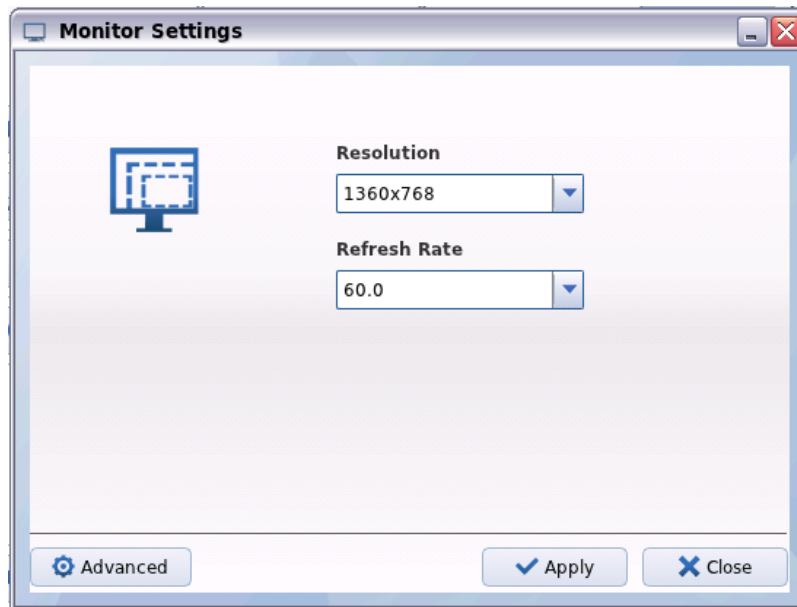
Determines how fast the cursor moves in response to the movements of the mouse.

Auto Hide Mouse Cursor:

This setting if applied hides the mouse cursor after specified interval.

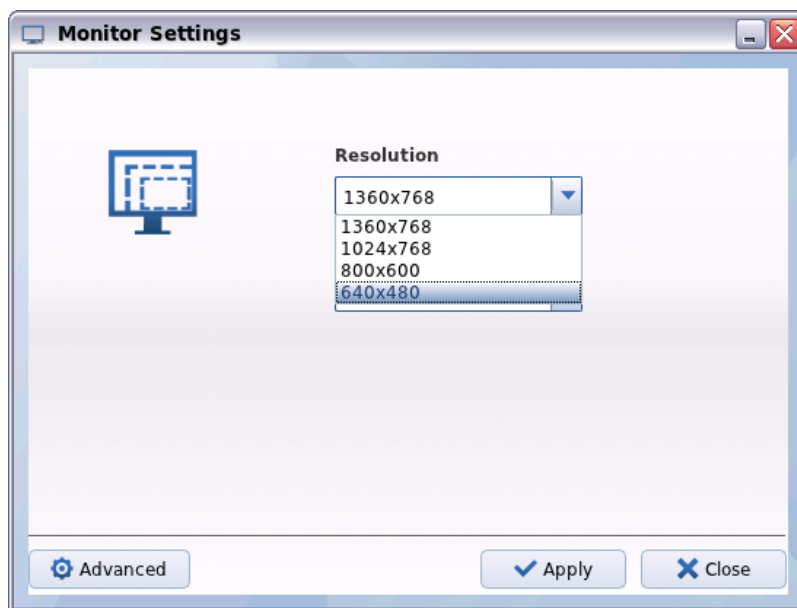
4.4.2. Display

User can select Resolution, and Refresh Rate using this tab.



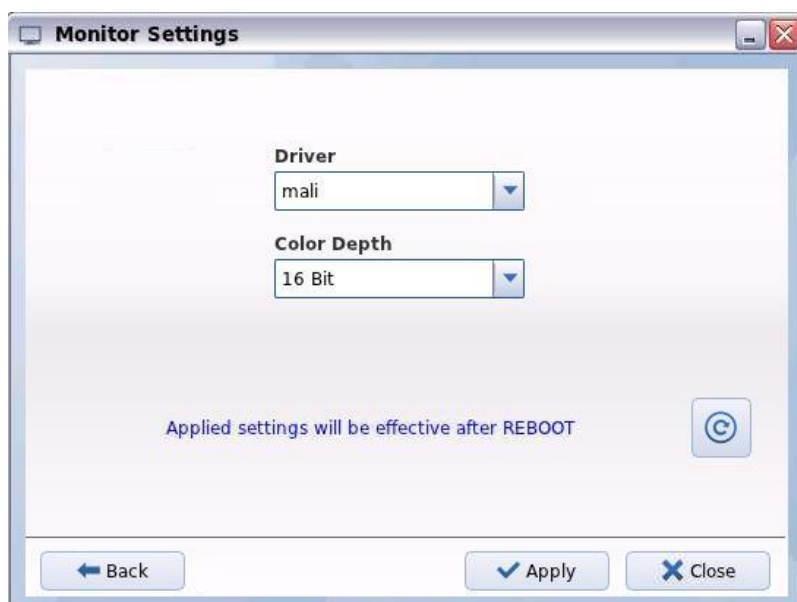
If resolution is set below 1024x768 then some icons or items may not fix in the screen.

User can select resolution from the list.



Advanced:

User can also select different Drivers and Color Depth for resolutions.



Drivers will be displayed based on the board you are using, for e.g. if you are using “Intel” board, then ‘vesa’ and ‘Intel’ drivers will be displayed in the list.

4.5. Printers

4.5.1. Printers



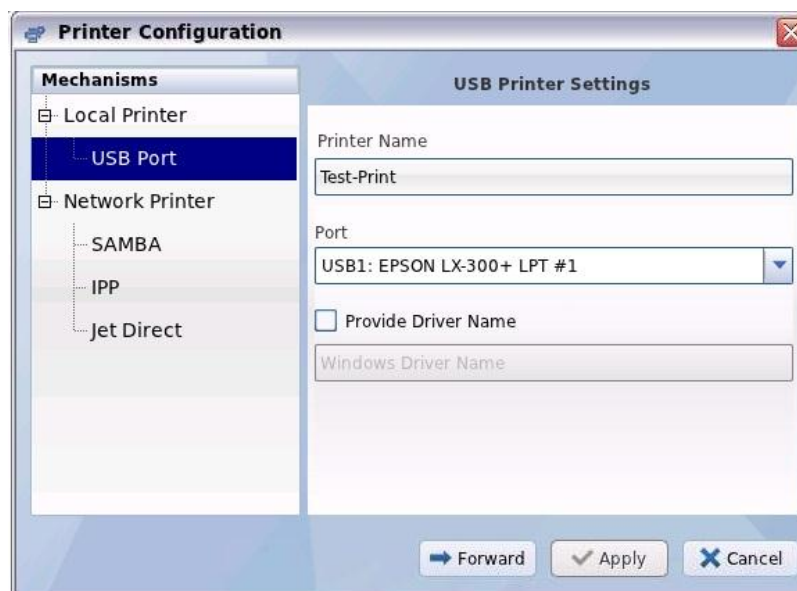
Adding a printer:



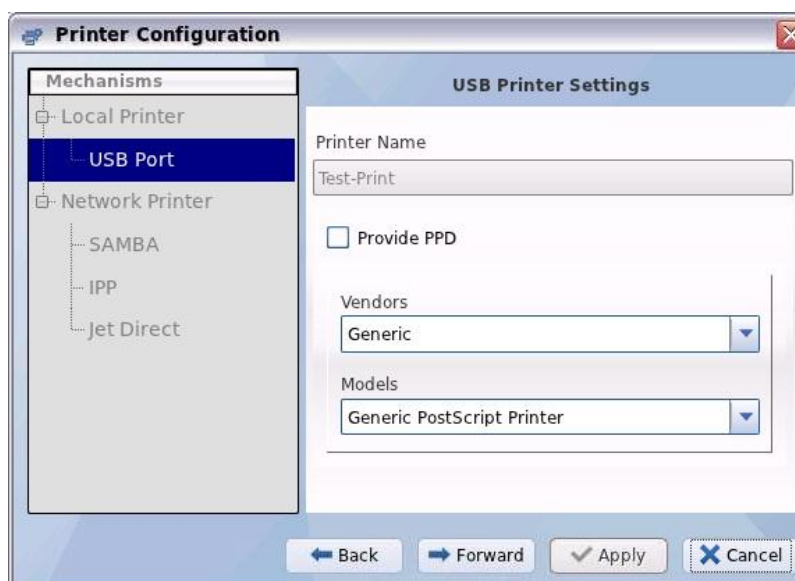
Local Printer:

(If your Printer is connected locally to the thin client)

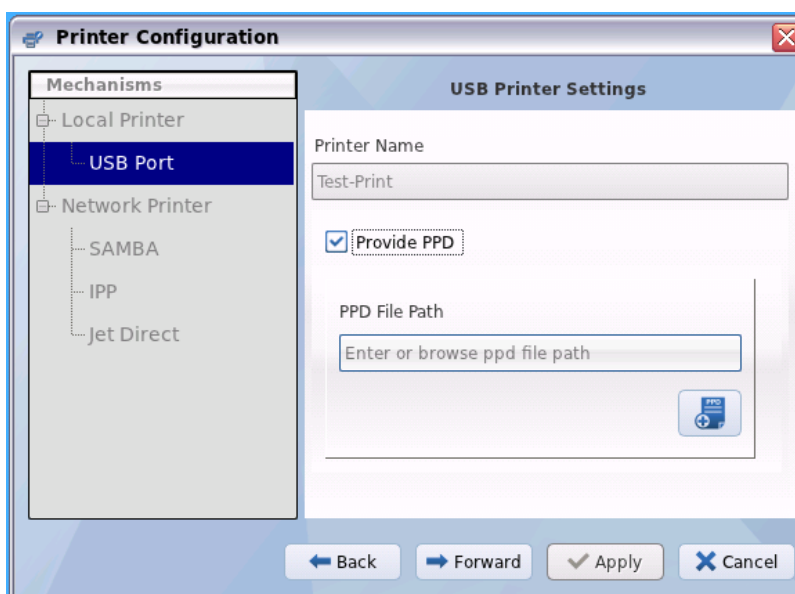
1. Click on “Add” option.
2. Select USB Port.



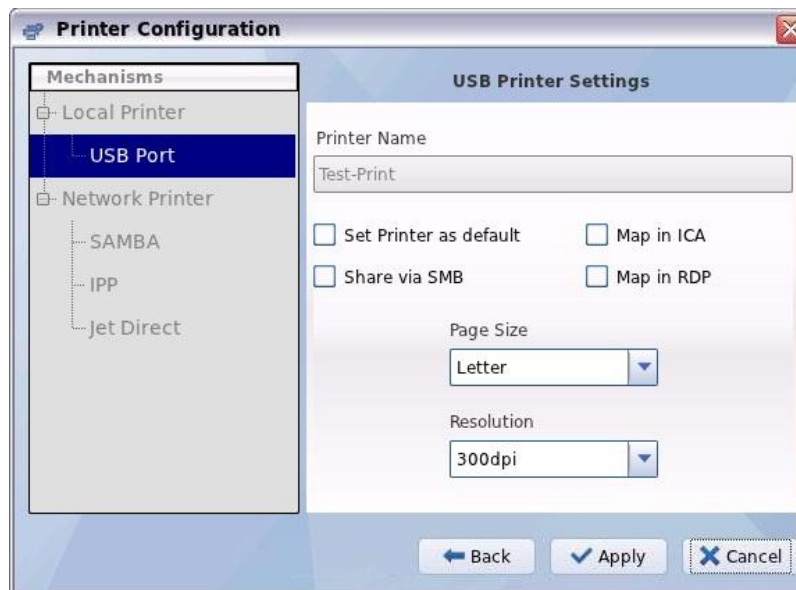
3. **Note : Raw Input Option is used to print in raw mode.**
4. Provide printer name and click forward button, default ppd files with Vendor name and their Model list will be loaded.



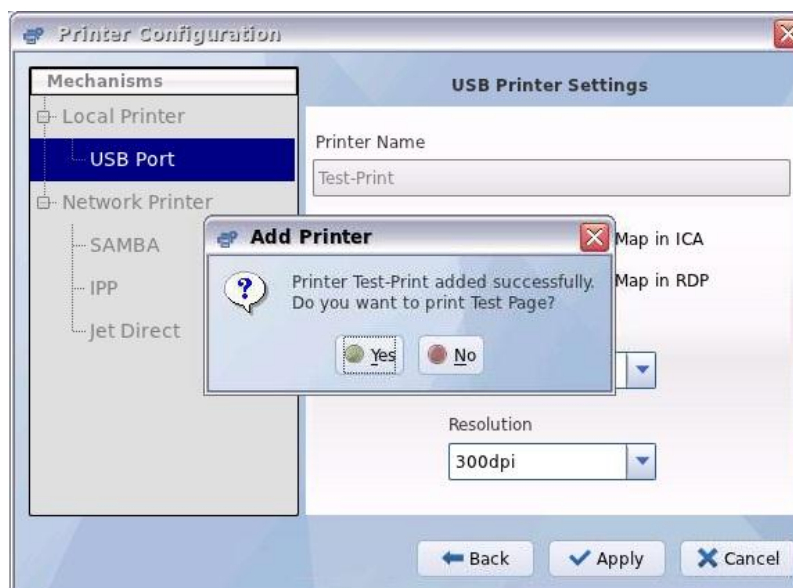
5. User can add PPD file through Provide PPD option, using storage media like NFS, SMB or USB.



6. User can select the options such as '**Set printer as default**' to make that printer as default printer, '**Map in ICA**' to map that printer in ICA session, '**Map in RDP**' to map that printer in RDP session, user can use '**Share via SMB**' option to share that printer (User can access the shared printer from run utility. Give IP address of the thin client. Double click on the shared printer and configure printer driver.



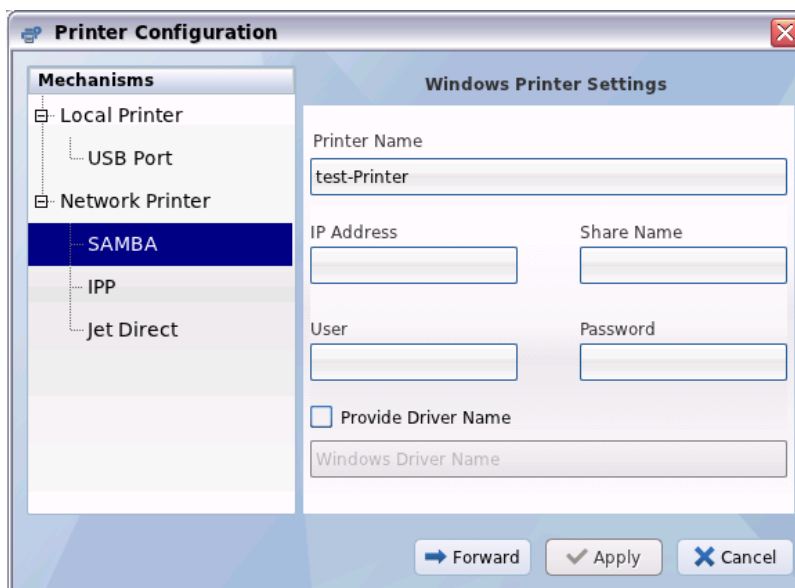
7. When the user click's on apply button it ask for Print Test Page.



Network Printer:

SAMBA Printing:

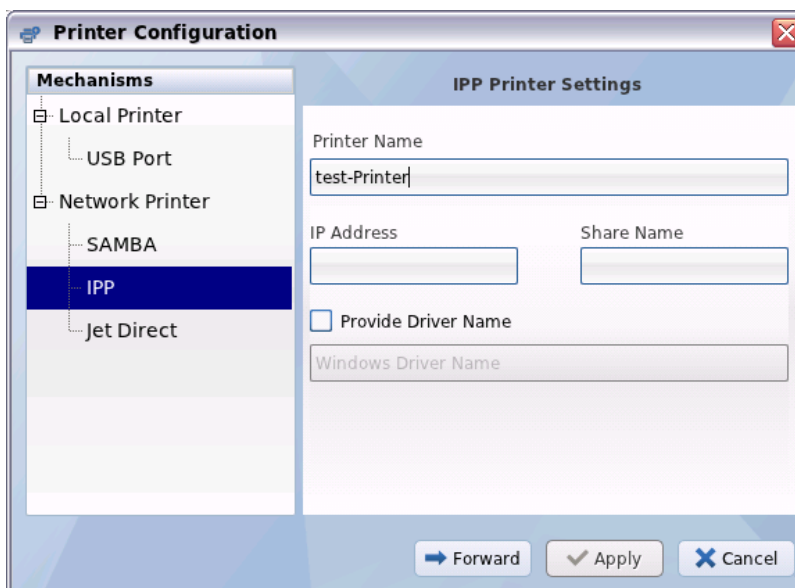
This mechanism is useful when printer is connected to any windows machine in network and you want to fire a print from thin client to that windows machine.



1. Click on “Add” button.
2. Select mechanism as SAMBA.
3. Provide printer name
4. Input IP address (IP address of windows machine where printer is connected).
5. Input Share name of that printer.
6. Input User name and Password.
7. Click on Forward button.
8. Default ppd files with Vendor name and their Model list will be loaded.
9. User can add PPD file through Provide PPD option, using storage media like NFS, SMB or USB.
10. Click on Forward button.
11. User can select the options such as ‘**Set printer as default**’ to make that printer as default printer, ‘**Map in ICA**’ to map that printer in ICA session, ‘**Map in RDP**’ to map that printer in RDP session, user can use ‘**Share via SMB**’ option to share that printer (User can access the shared printer from run utility. Give IP address of the thin client. Double click on the shared printer and configure printer driver.
12. Click on Apply Button.

IPP Printing:

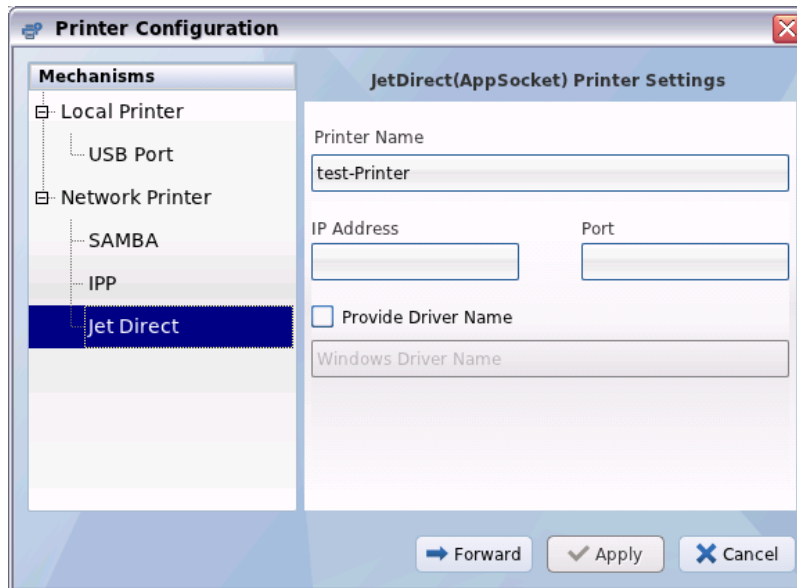
This mechanism is useful when printer is connected to any LINUX machine in network and you want to fire a print from thin client to that LINUX machine.



1. Click on “Add” button.
2. Select mechanism as IPP.
3. Provide Printer Name.
4. Input IP address (IP address of LINUX machine where printer is connected).
5. Input Share Name of that printer.
6. Click on Forward button.
7. Default ppd files with Vendor name and their Model list will be loaded.
8. User can add PPD file through Provide PPD option, using storage media like NFS, SMB or USB.
9. Click on Forward button.
10. User can select the options such as **‘Set printer as default’** to make that printer as default printer, **‘Map in ICA’** to map that printer in ICA session, **‘Map in RDP’** to map that printer in RDP session, user can use **‘Share via SMB’** option to share that printer (User can access the shared printer from run utility. Give IP address of the thin client. Double click on the shared printer and configure printer driver.
11. Click on Apply Button.

Jet Direct:

If user wants to fire a print from your Thin Client to another Thin Client/Network printer, use this mechanism.



Thin Client from where printing would be fired:

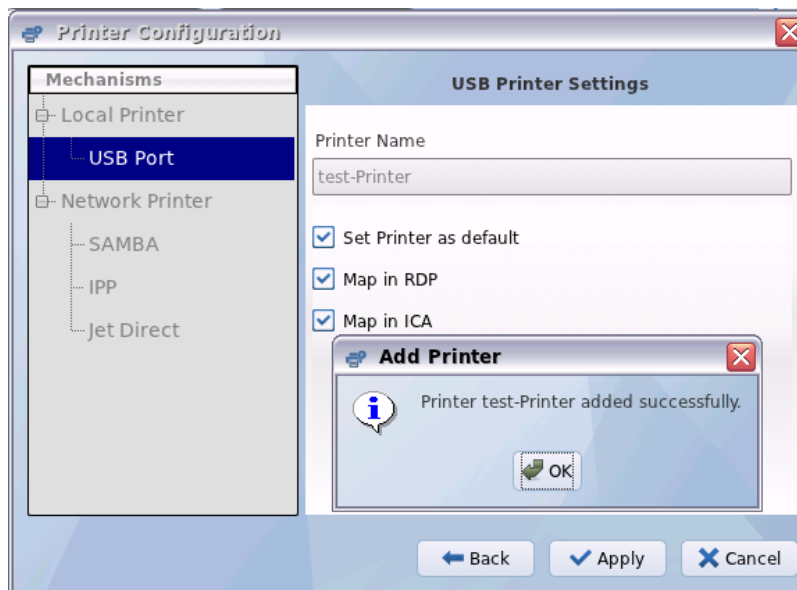
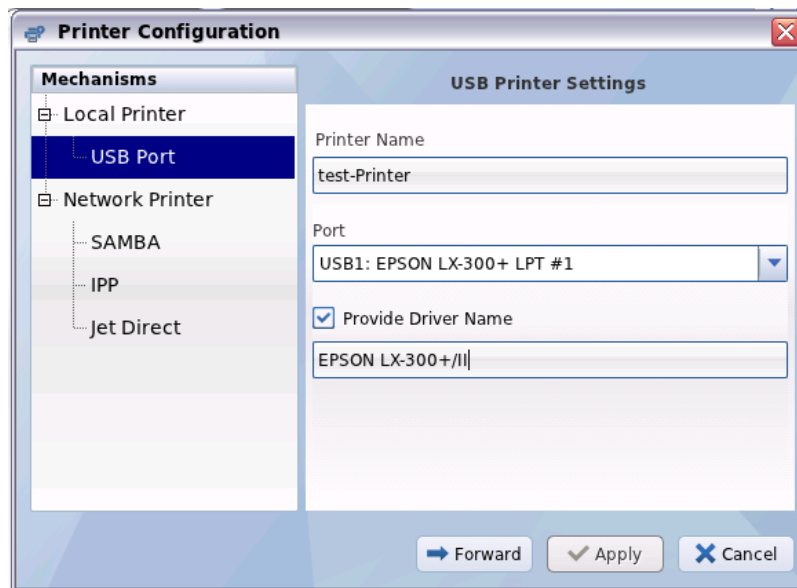
1. Click on “Add” button.
2. Select mechanism as IPP.
3. Provide Printer Name.
4. Input IP address (IP address of thin client where printer is connected).
5. Click on Forward button.
6. Default ppd files with Vendor name and their Model list will be loaded.
7. User can add PPD file through Provide PPD option, using storage media like NFS, SMB or USB.
8. Click on Forward button.
9. User can select the options such as **‘Set printer as default’** to make that printer as default printer, **‘Map in ICA’** to map that printer in ICA session, **‘Map in RDP’** to map that printer in RDP session, user can use **‘Share via SMB’** option to share that printer (User can access the shared printer from run utility. Give IP address of the thin client. Double click on the shared printer and configure printer driver.
10. Click on Apply Button.

Thin Client where the printer is connected:

1. Go to Printing tab.
2. Select Jet Direct option.
3. Select the port for printer i.e. LPT for Parallel Printer, USB for USB Printer, COM for Serial Printers. Here the default port no. is 9100.
4. Click on Apply button.

Remote Printing:

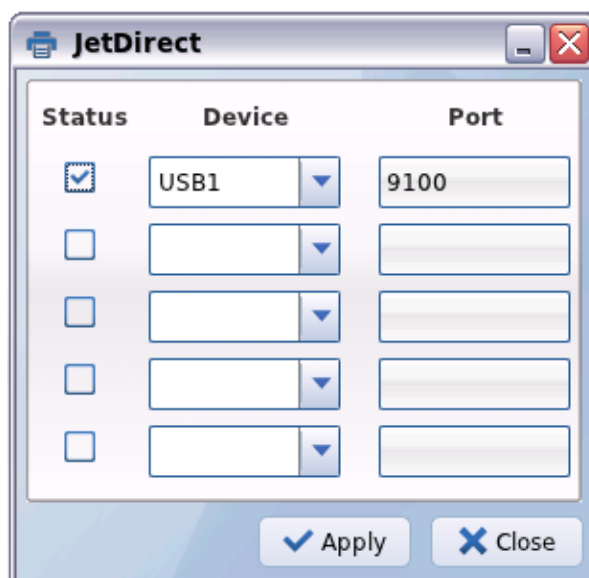
User can use this mechanism with any of above local printing protocols and Network protocols to map the Local printer in RDP/ICA session with Windows driver name which is installed on server side.



1. Click on “Add” button.
2. Select any Local or Network Printer.
3. Provide Printer Name.
4. Provide Driver Name. (Exactly Same As in Server.)
5. User can select the options such as ‘**Set printer as default**’ to make that printer as default printer, ‘**Map in RDP**’ to map that printer in RDP session, ‘**Map in ICA**’ to map that printer in RDP session.
6. Click on Apply button.

4.5.2. Jet Direct

In Jet Direct, printer is connected to thin client and print can be fired from various servers/Thin Clients.



The following are the printing scenarios for Jet direct:

Steps for server side:

1. Add printer on server.
2. Assign TCP/IP port.
3. Give IP address of the thin client.

Steps for client side:

1. Go to Printing tab.
2. Select Jet Direct option.
3. Select the port for printer i.e. LPT1 for Parallel Printer, USB for USB Printer, COM1 or COM2 for Serial Printers. Here the default port no. is 9100.
4. Click on Apply.

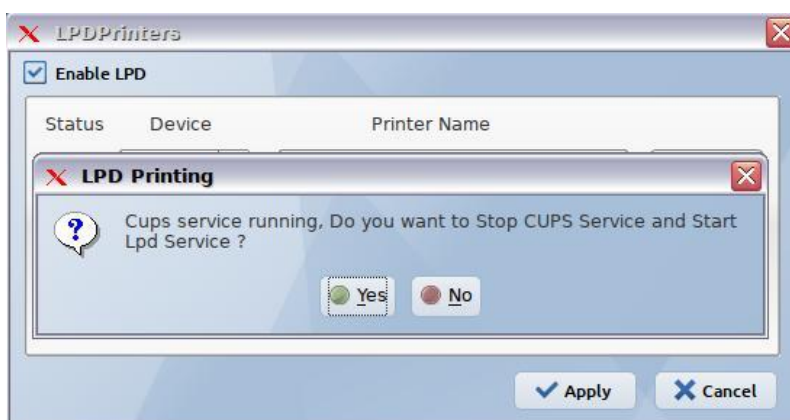
4.5.3. LPD Printers

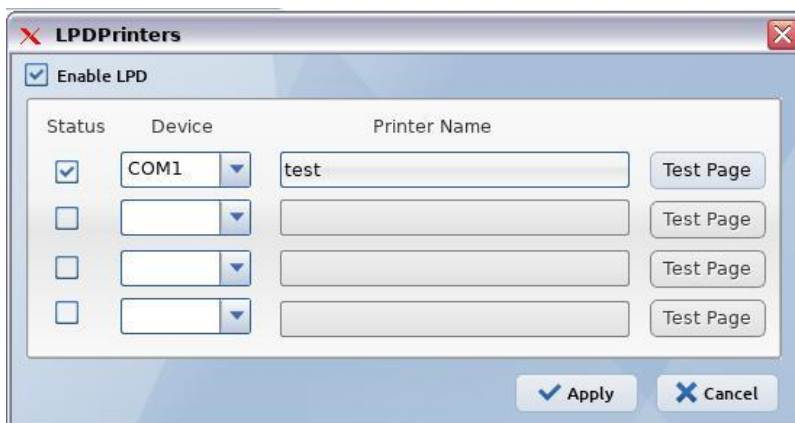
The Line Printer Daemon protocol/Line Printer Remote protocol (LPD) is a network protocol for submitting print jobs to a remote printer.



Steps for client side:

1. Go to Printing tab.
2. Select LPD Printers.
3. Enable LPD. After enabling, it asks for stopping CUPS services.
4. Click on Yes.
5. Select the device and provide printer name.
6. Click on Apply.
7. Print a Test Page.



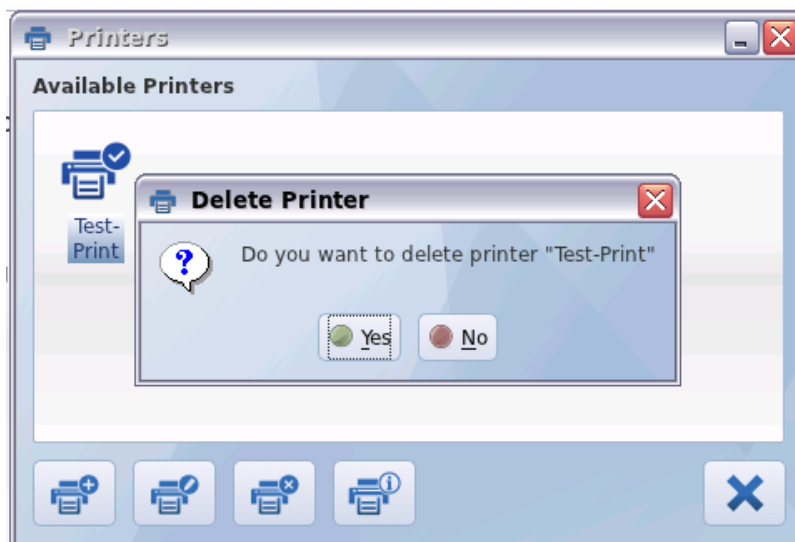


Edit Printer:

User can edit the printer by selecting edit printer option.

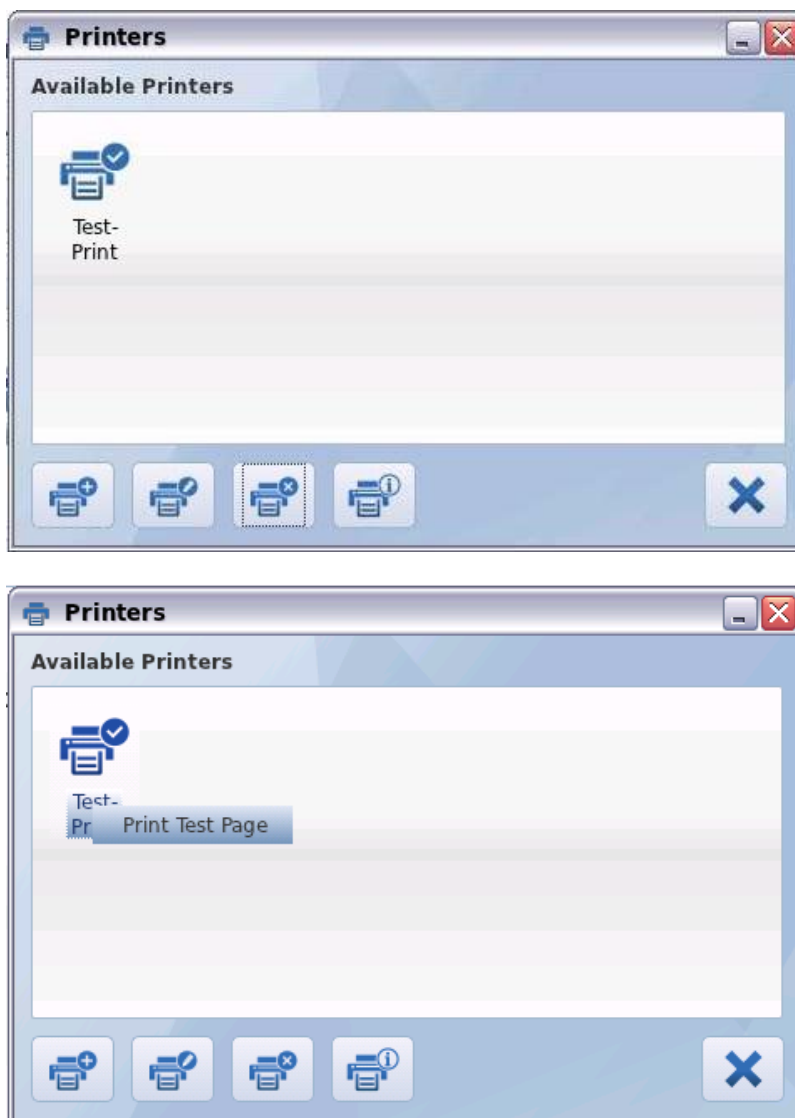
Delete Printer:

User can delete any printer by selecting delete printer option.



Printer Test Page:

User can print a test page to check whether the printer has been added properly and whether printer works fine with Thin Client.



Users can Print Test Page by selecting the printer and right click.

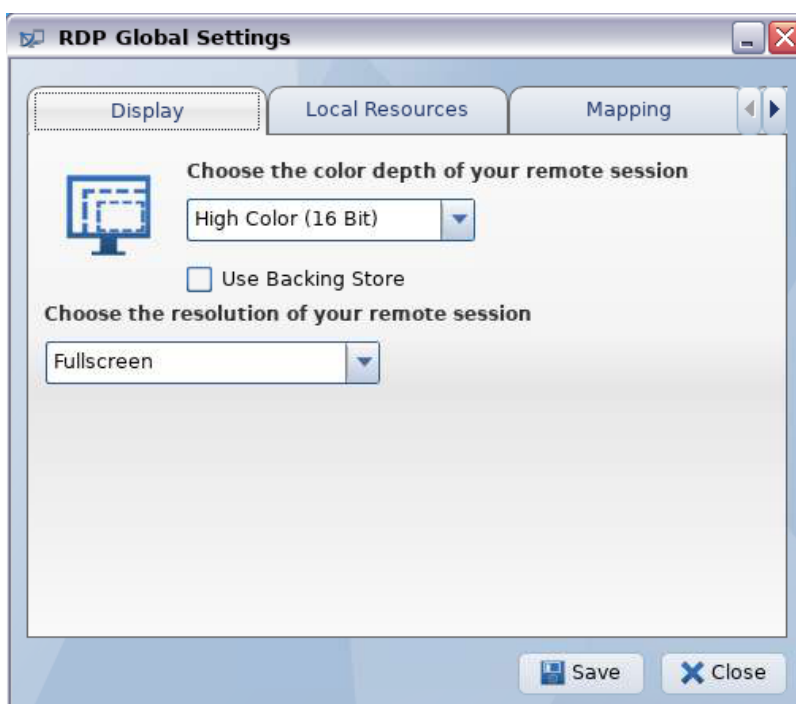
4.6. Global Settings

Global Settings tab enables administrator to edit RDP, ICA, and Browser Global Settings, Update Firmware and Configure firewall.



4.6.1. RDP Global Display:

User can set global settings for the Color Depth, Resolution and Backing Store.



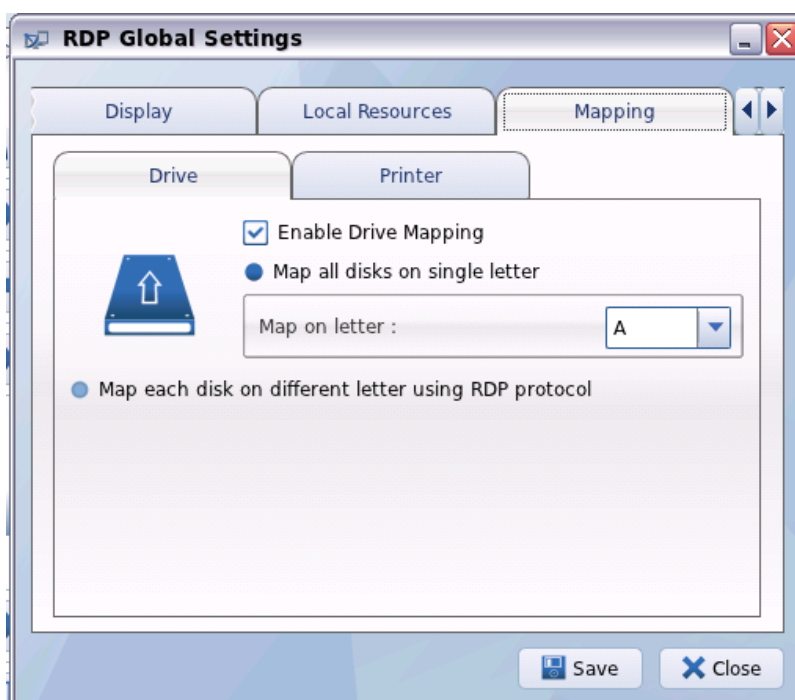
Local Resources:

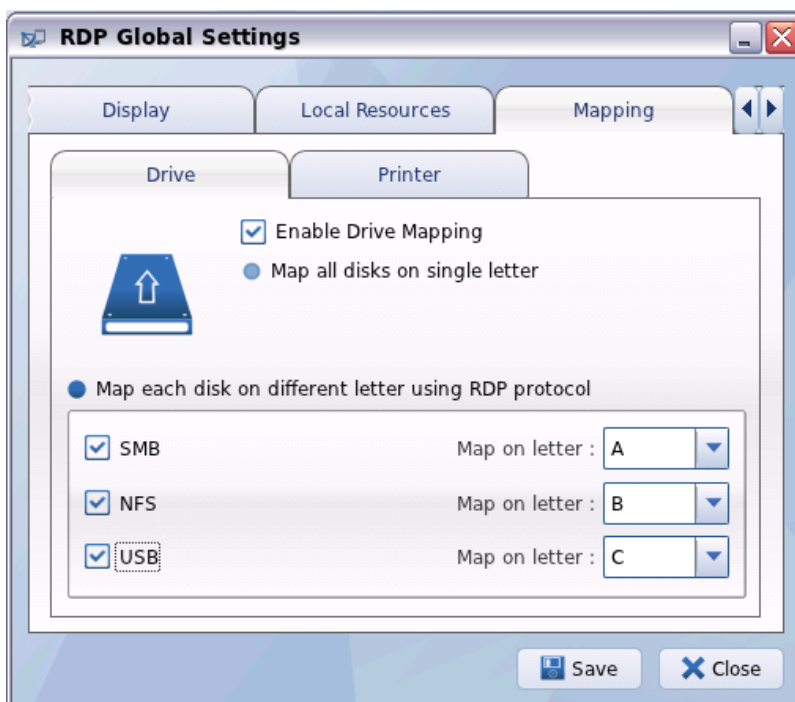
User can set the Keyboard Layouts, Configure Remote Audio Settings and map key bindings.



Mapping – Drive:

User can assign different characters for mapping of different disks and assign single character for all disks in this tab. Local storage (SMB, NFS, and Local USB) should be mounted in RDP session with single or different assigned letters.

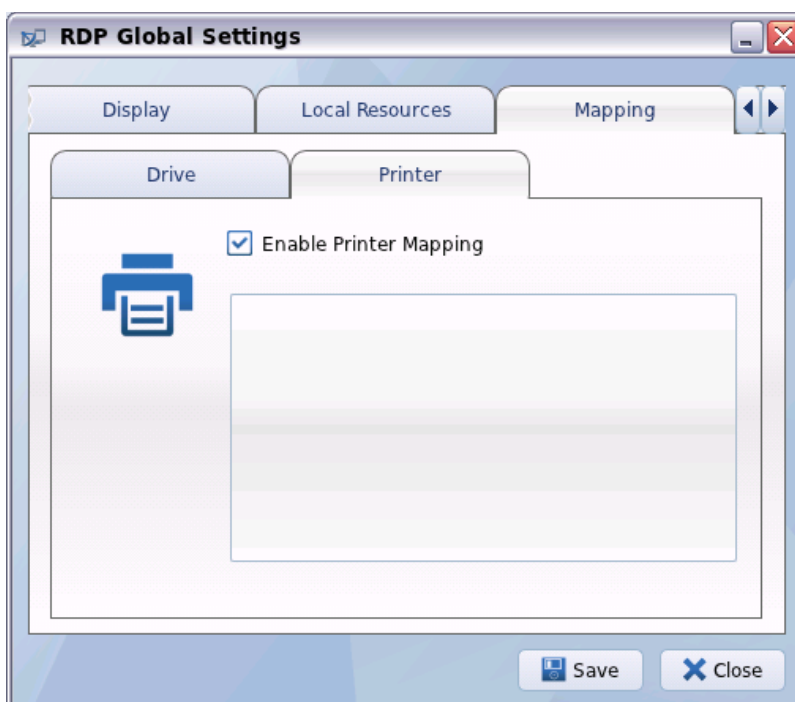




Mapping – Printer:

To use printer, enable this option. After this global setting the printer will be redirected in the RDP session. Applications running within a remote desktop session can print to a printer attached to the client device.

To redirect more than one printer, select the appropriate printer from the available added printer list.



Programs:

Input Path of Application (exe path) in Program Path and the file name if you want to invoke particular application. After this if you connect to RDP session only your specified application will invoke. This will act as a default application.



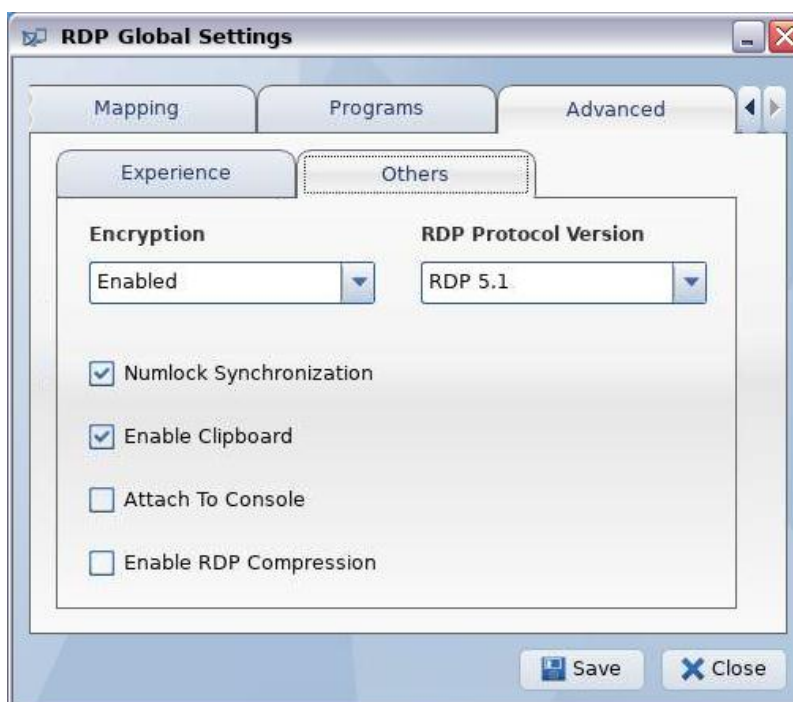
Advanced – Experience:

The settings on this tab allow you to disable certain features to improve performance or enable features to improve the appearance of the remote desktop. As indicated, select your connection speed to optimize performance.



Advanced – Other:

The settings on this tab allow you to configure miscellaneous features of RDP protocol.



4.6.2. ICA Global

Preferences – Keyboard Settings:

User can set the Keyboard Layouts, Keyboard Type (Client), Keyboard Type (Server), enable or disable Window Alert Sounds, allow or disallow Audio Input.



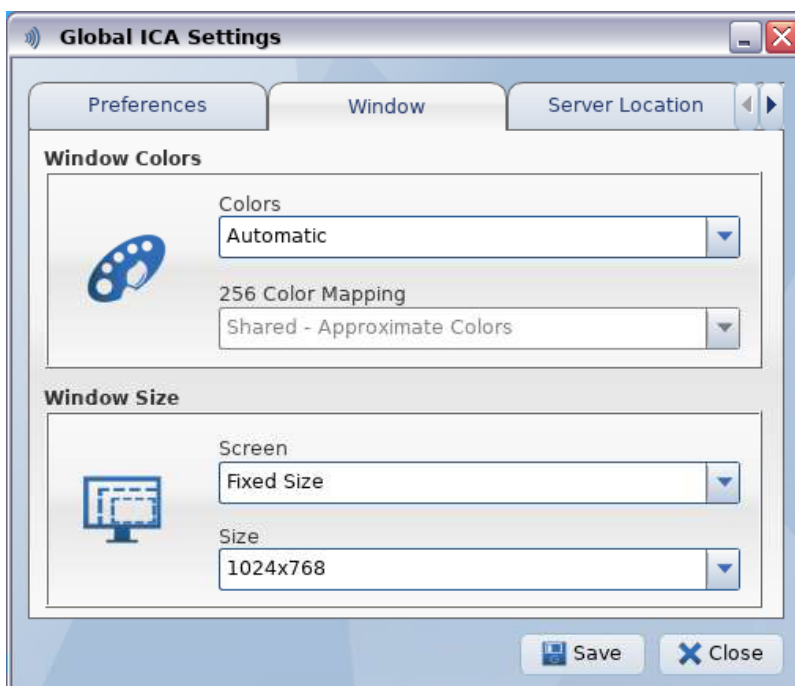
Preferences – Keyboard Shortcuts:

User can set the Keyboard Shortcuts from this tab.



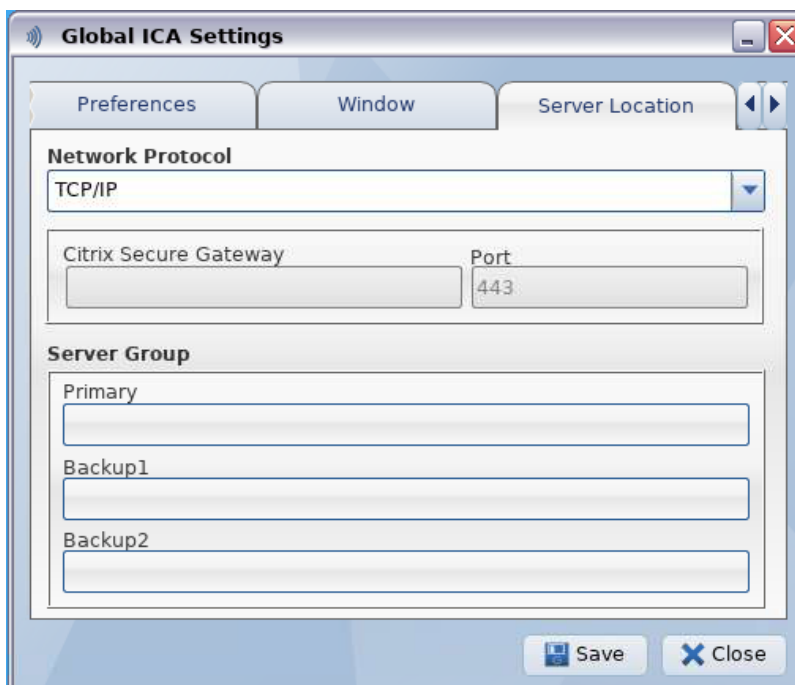
Window:

User can set global settings for the Screen, Size, and Window Colors options.



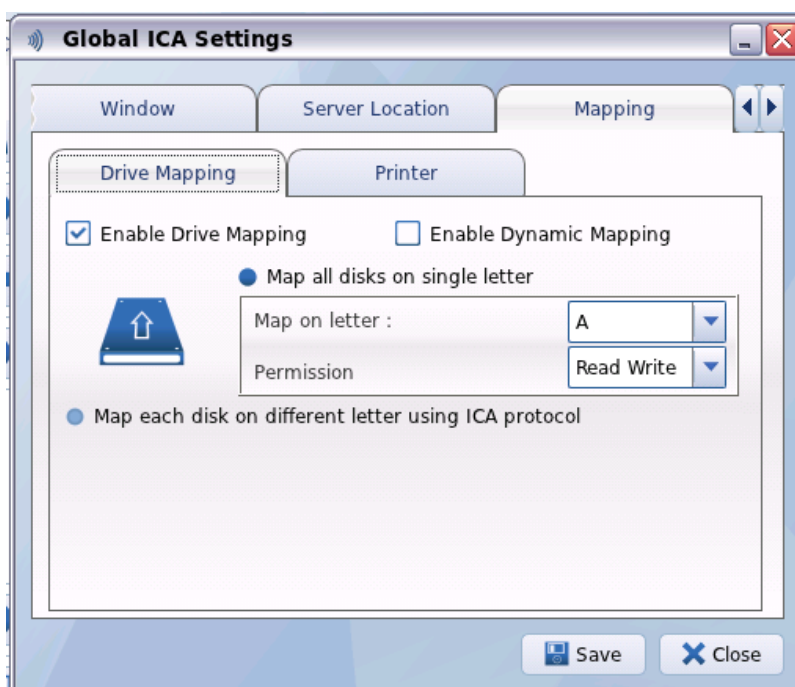
Server Location:

User can select the Default Network Protocol for the ICA server.



Mapping – Drive Mapping:

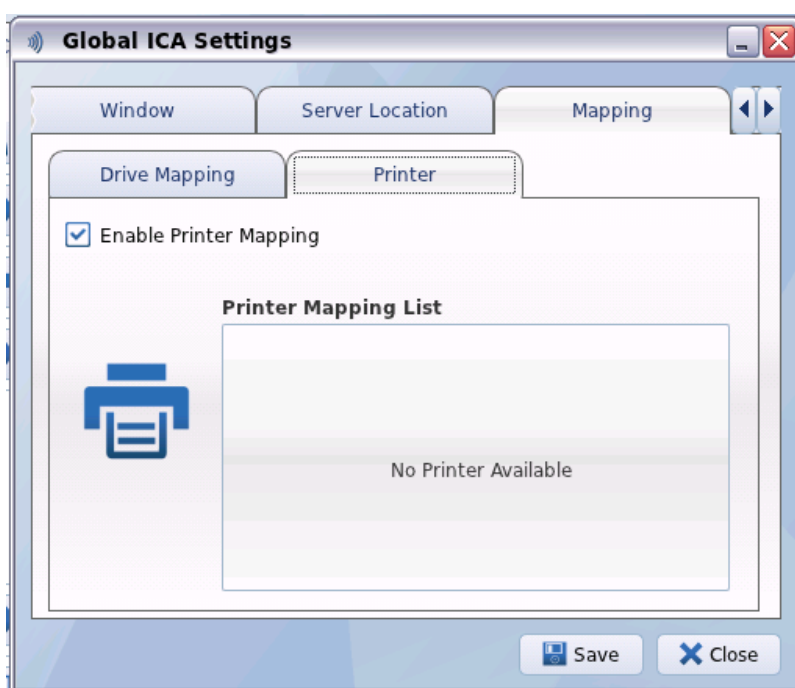
User can assign different characters for mapping of different disks and assign single character for all disks in this tab. Local storage (SMB, NFS, and Local USB) should be mounted in ICA session with single or different assigned letters.



Mapping - Printer:

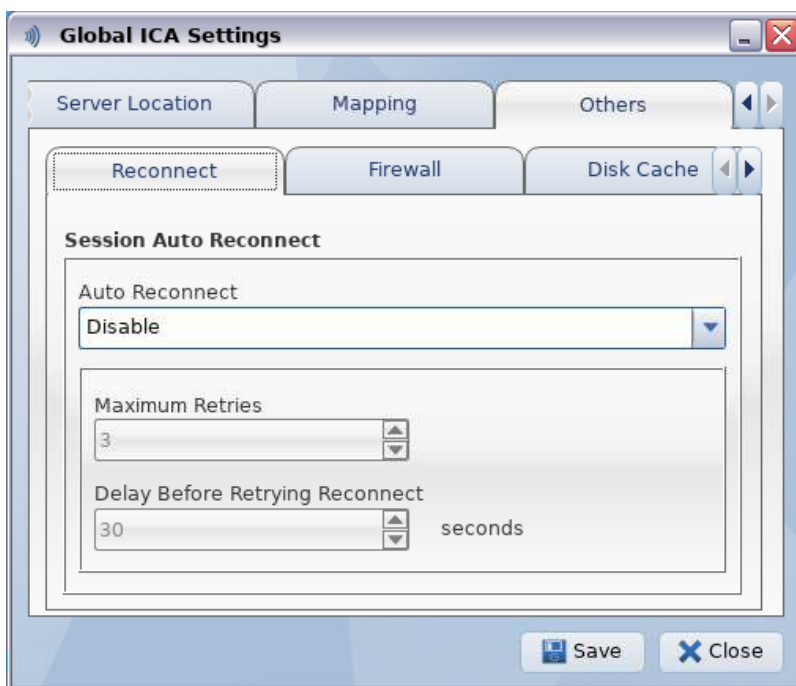
To use printer, enable this option. After this global setting the printer will be redirected in the ICA session. Applications running within a remote desktop session can print to a printer attached to the client device.

To redirect more than one printer, select the appropriate printer from the available added printer list.



Other – Reconnect:

By enabling Auto Reconnect option, user can get the access of ICA session when session is lost due to low connectivity. The maximum retries can be set from here.



Other – Firewall:

User can perform the Firewall setting for the ICA server.



Other – Disk Cache:

User can perform the Disk Cache setting for the ICA server.



Other – Font:



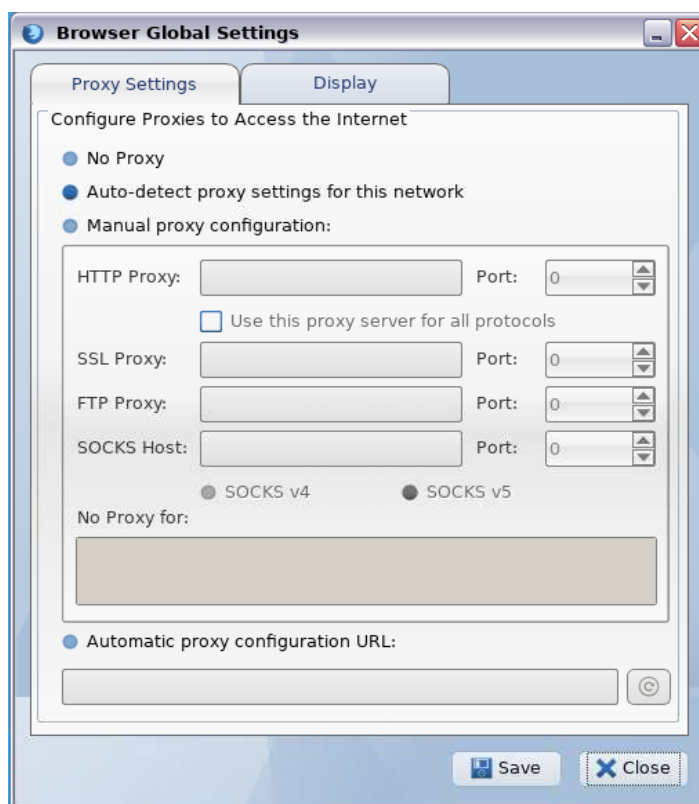
Other – Restore:

This option allows user to restore ICA Global Settings.



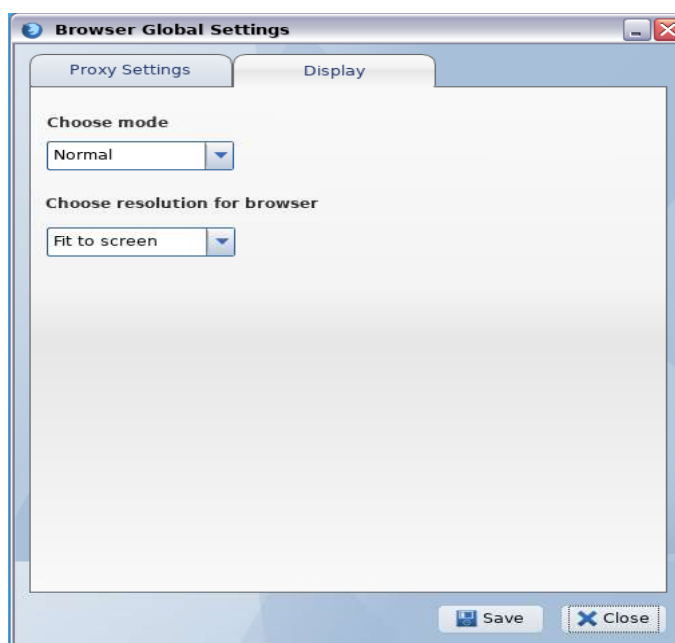
4.6.3. Browser Global Proxy Settings:

User can set Proxy settings (if available) for Browser in this tab.



Display:

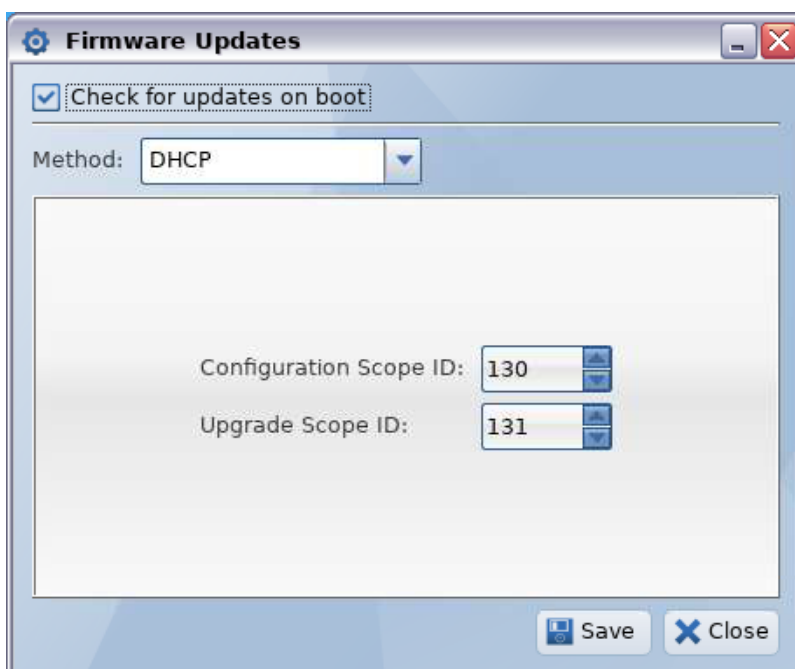
User can choose resolution for browser and choose mode i.e. Normal, Kiosk, Super kiosk.



4.6.4. Firmware Update

Firmware update is the utility used to update the Thin Clients by putting the configuration file on the FTP/ HTTP server. Thin Clients will automatically get updated automatically once rebooted. With this utility we can upgrade the multiple Thin Clients at the same time automatically.

DHCP Method:



1. Select method as DHCP.

2. Enter Configuration Scope ID.
3. Enter Upgrade Scope ID.
4. Click on Save.

HTTP Method:

Firmware Updates

☒ Check for updates on boot

Method: HTTP

Server:

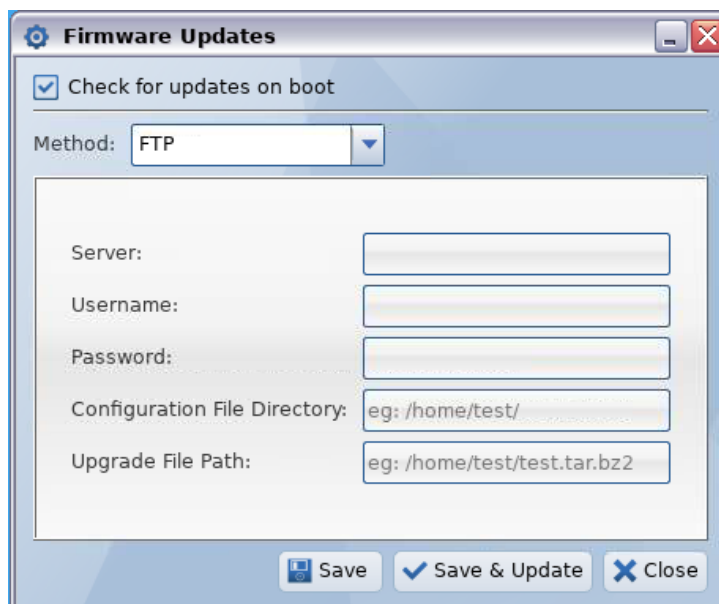
Configuration File Directory:

Upgrade File Path:

Save Save & Update Close

1. Select Method as HTTP.
2. Enter Server IP Address.
3. Enter Configuration File Directory.
4. Enter Upgrade File Path.
5. Click on Save button to save the settings.
Settings will get saved and at next reboot Configuration settings will be applied on the Thin Client with the configuration file kept on server.
6. If Thin Client should save and update immediately, click on Save & Update button.
Thin Client will get updated immediately and will get rebooted.

FTP Method:



1. Select Method as FTP.
2. Enter Server IP Address.
3. Enter Username of the FTP Server.
4. Enter Password of the FTP Server.
5. Enter Configuration File Directory.
6. Enter Upgrade File Path.
7. Click on Save button to save the settings.
Settings will get saved and at next reboot Configuration settings will be applied on the Thin Client with the configuration file kept on server.
8. If Thin Client should save and update immediately, click on Save & Update button. Thin Client will get updated immediately and will get rebooted.

4.6.5 Firewall Configurator

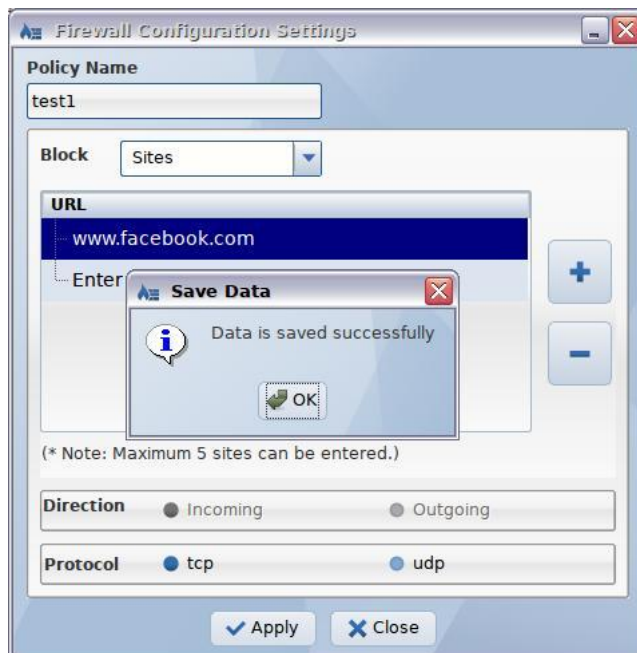
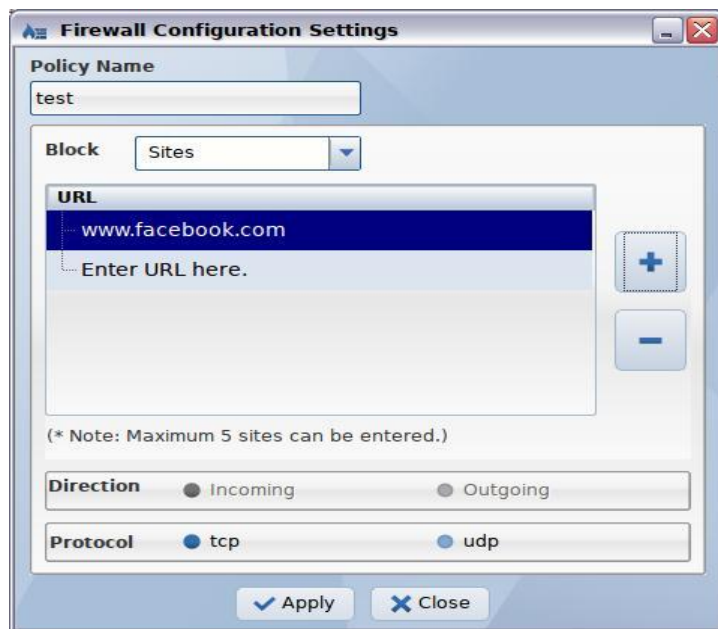
Firewall Configurator is GUI Utility to block incoming or outgoing traffic with different IP address as well as web sites.



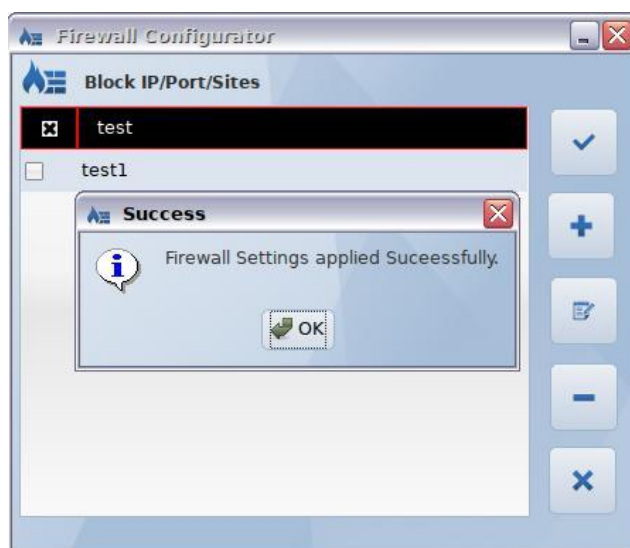
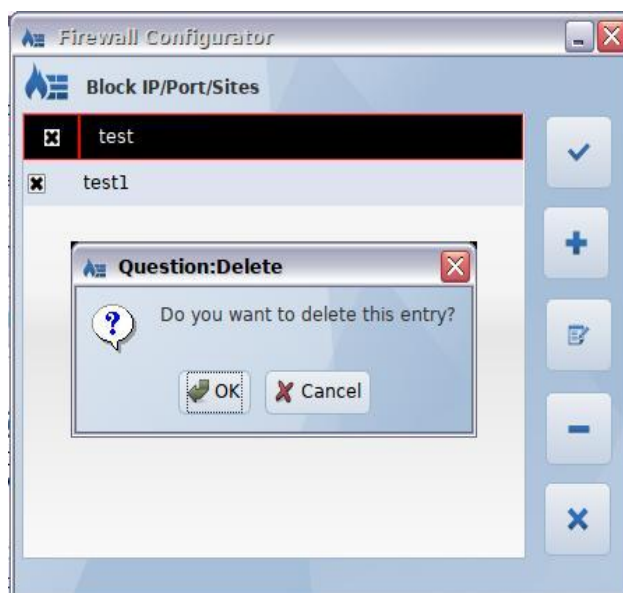
Blocking by IP/Port Settings:



Blocking by Sites:

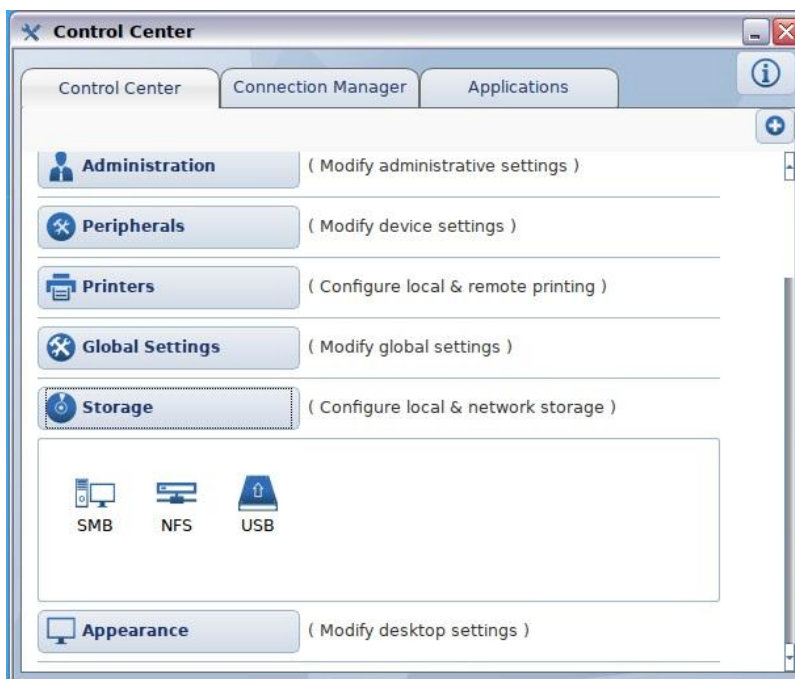


To delete created IP or sites:



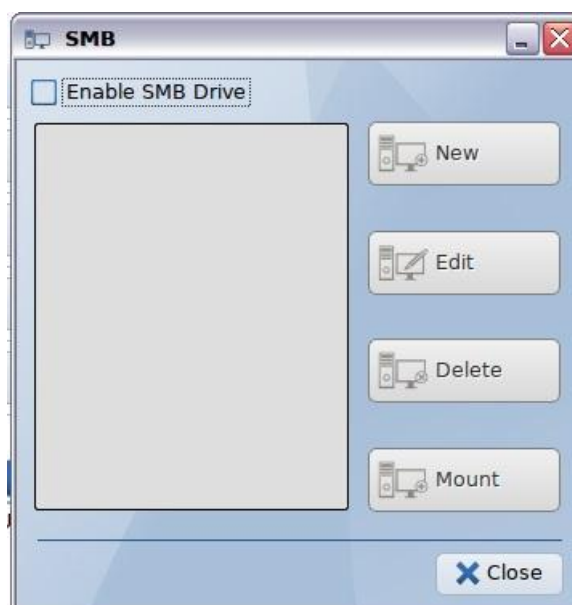
4.7 Storage

In storage tab, User can mount different storages like SMB and NFS. Mount other devices like USB pen drive.



4.7.1 SMB

User can add, edit, delete and Mount / Unmount shared storage drives over network using SMB Protocol using this Tab. SMB share can be mapped as '**Read-Only**' by checking in the check box.

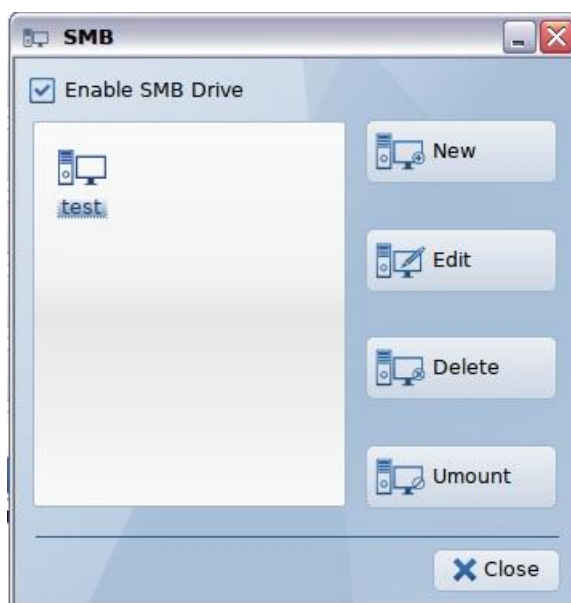


For SMB share user need to provide some information.



The 'SMB - New' dialog box is used to create a new SMB share. It contains the following fields and options:

- User:** A dropdown menu with 'root' selected.
- Name:** An empty text input field.
- Server IP:** An empty text input field.
- Share Name:** An empty text input field.
- Username:** An empty text input field.
- Password:** An empty text input field.
- ReadOnly:** A checkbox that is currently unchecked.
- Buttons:** 'Apply' and 'Close' buttons at the bottom right.



The main 'SMB' window displays the status of SMB drives. It includes:

- Enable SMB Drive:** A checked checkbox.
- Drives List:** A list area showing a drive named 'test' with a computer icon.
- Actions:** Buttons for 'New', 'Edit', 'Delete', and 'Umount' on the right side.
- Close:** A button at the bottom right.

To edit a SMB share, click on Umount button. The SMB share gets umounted successfully. User can edit the SMB share only after umounting it.

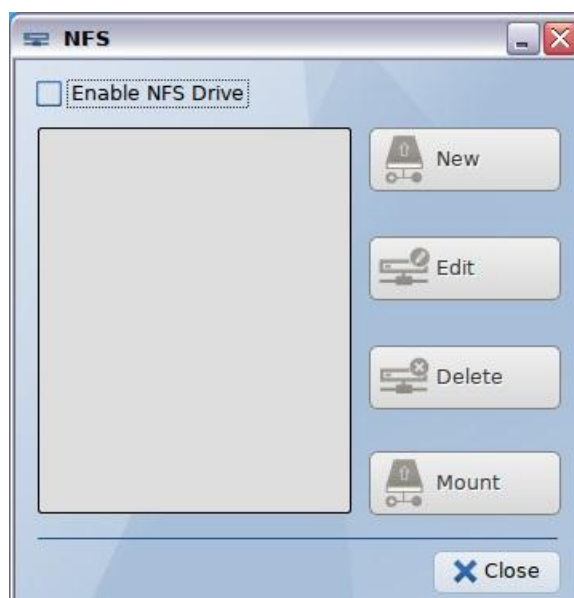
If wrong credentials are enter it gives as error message.

To umount a SMB share, click on Umount button. The SMB share gets umounted successfully. To again mount the share, click on Mount button. The SMB share gets mounted successfully.

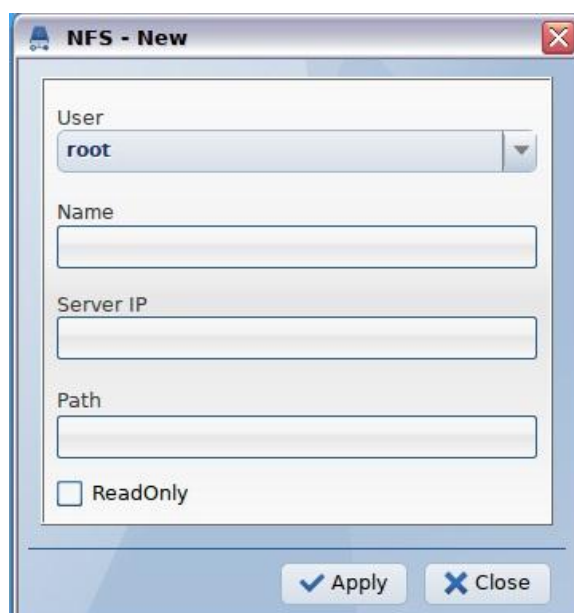
To delete a share, umount the SMB share and click on Delete button. The SMB share gets deleted successfully.

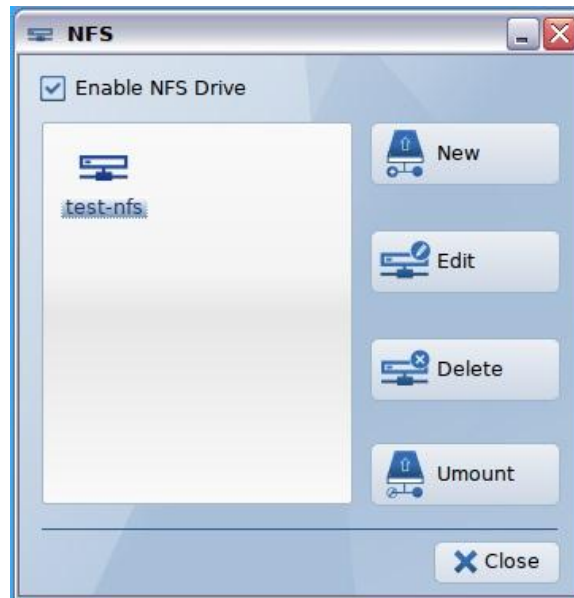
4.7.2 NFS

Using NFS tab user can add, edit, delete and Mount/Unmount shared storage drives over network using NFS protocols. NFS share can be mapped as '**Read-Only**' by checking in the check box.



For SMB share user need to provide some information.





To edit a NFS share, click on Umount button. The NFS share gets umounted successfully. User can edit the NFS share only after unmounting it.

If wrong credentials are enter it gives as error message.

To umount a NFS share, click on Umount button. The NFS share gets umounted successfully. To again mount the share, click on Mount button. The NFS share gets mounted successfully.

To delete a share, umount the NFS share and click on Delete button. The NFS share gets deleted successfully.

4.7.3 USB

Using USB tab user can enable Mount/Unmount USB devices. USB can be mapped as **'Read-Only'** by checking in the check box.

Share Drives via SMB:

By using this option you can access mounted drives in your Windows desktop through RUN utility. To access this feature go to Windows start menu => run => command prompt =>input IP address or Host name of Thinclient then click on OK button. User can now access the USB data.



4.8 Appearance

User can personalize the appearance of the system from this tab.



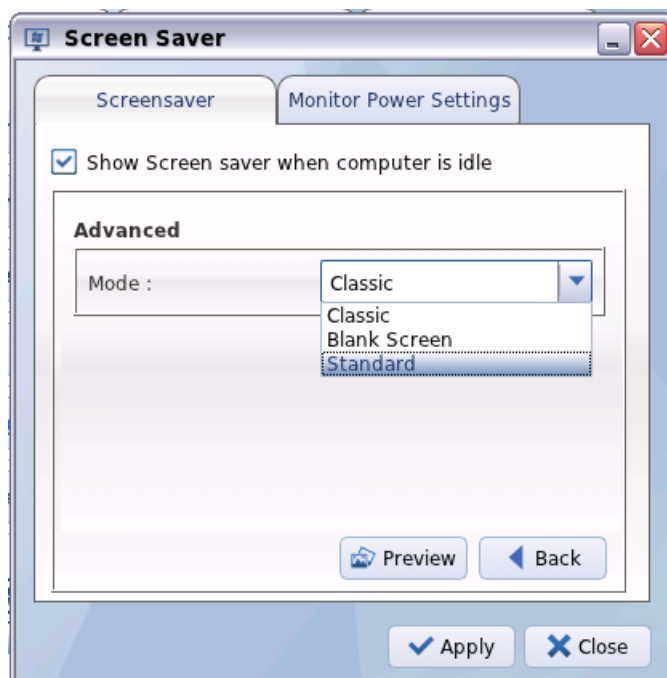
4.8.1 Screen Saver

4.8.1.1 Screen Saver

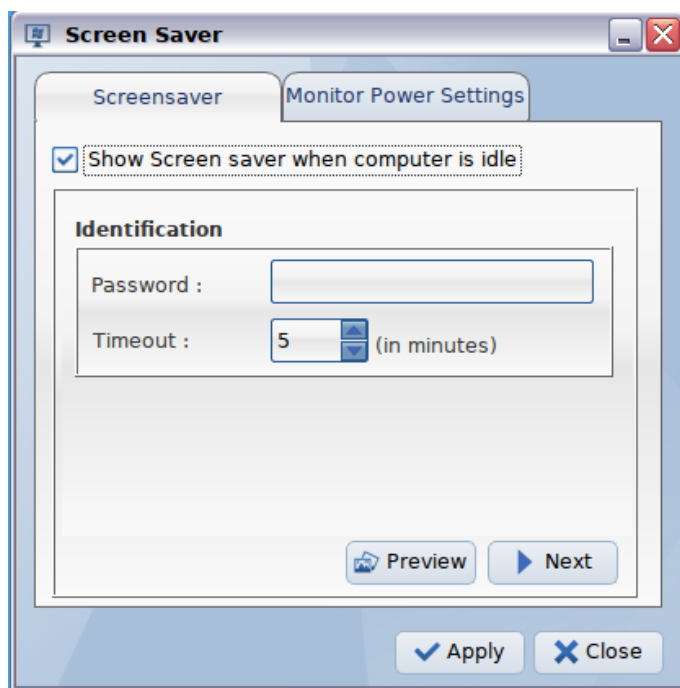
User can set screen-saver to the desktop. To set a screen saver, enable the checkbox of Screensaver. By default, the time-out will be set to 5 min. User can change the time-out period. When the time-out completes, the screen saver will appear.



Click next for Advanced Settings. User can also apply advanced settings by selecting the advanced option. In this option user can set screensaver mode, Slideshow mode, Slideshow interval options of the screensaver.

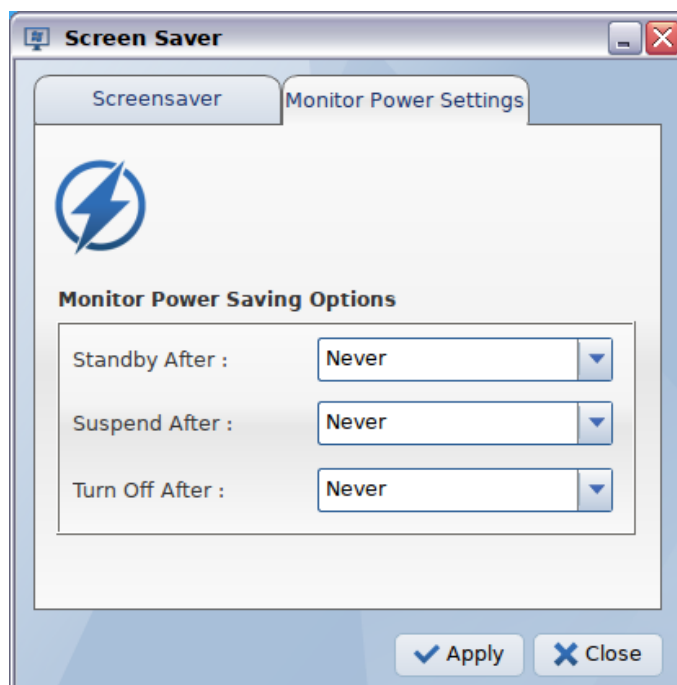


To enable lock screen, enter Password in the password field.



4.8.1.2 Monitor Power Settings

User can set standby, suspend and off timing of the monitor using this tab. If you don't want to use Monitor Power Settings then select "Never" from the list.



4.8.2 Background

User can change background image of system from this tab. All the images present in the file system will be shown here.



To view images from Local Storages choose “Select path to list backgrounds”. All the images present in the mounted storages will be shown here.



The background can be set in different styles: Tile, Center and Fullscreen.



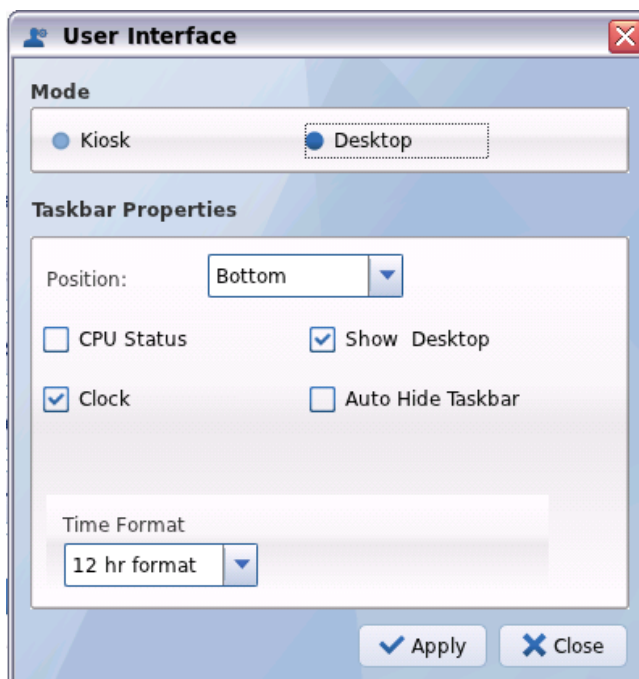
User can also select a color as a background. Three options are given: Solid Color, Horizontal gradient and Vertical gradient.





4.8.3 User Interface

By using this tab User can change Mode (Desktop/Kiosk), task bar properties.



Mode change to Kiosk:

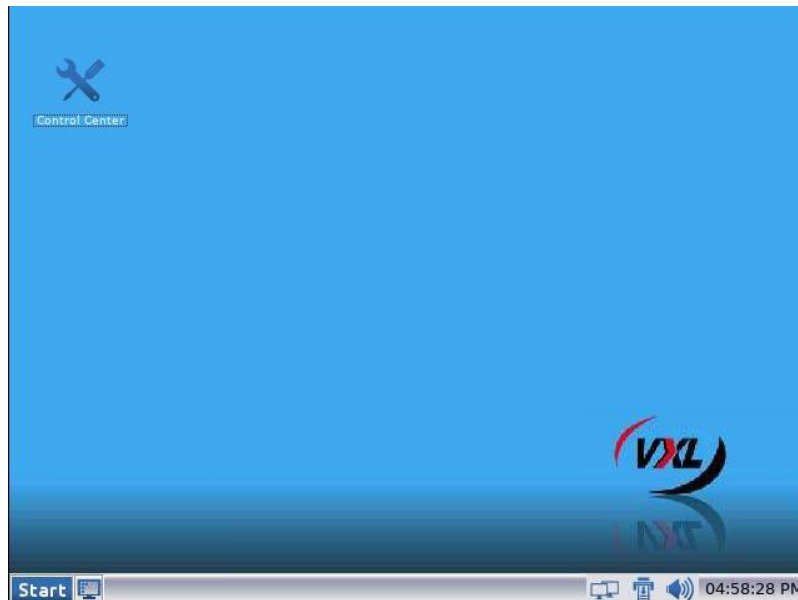
After changing mode to kiosk , user can launch either Control Center, different Connections or Applications as the default program, once settings is been applied.





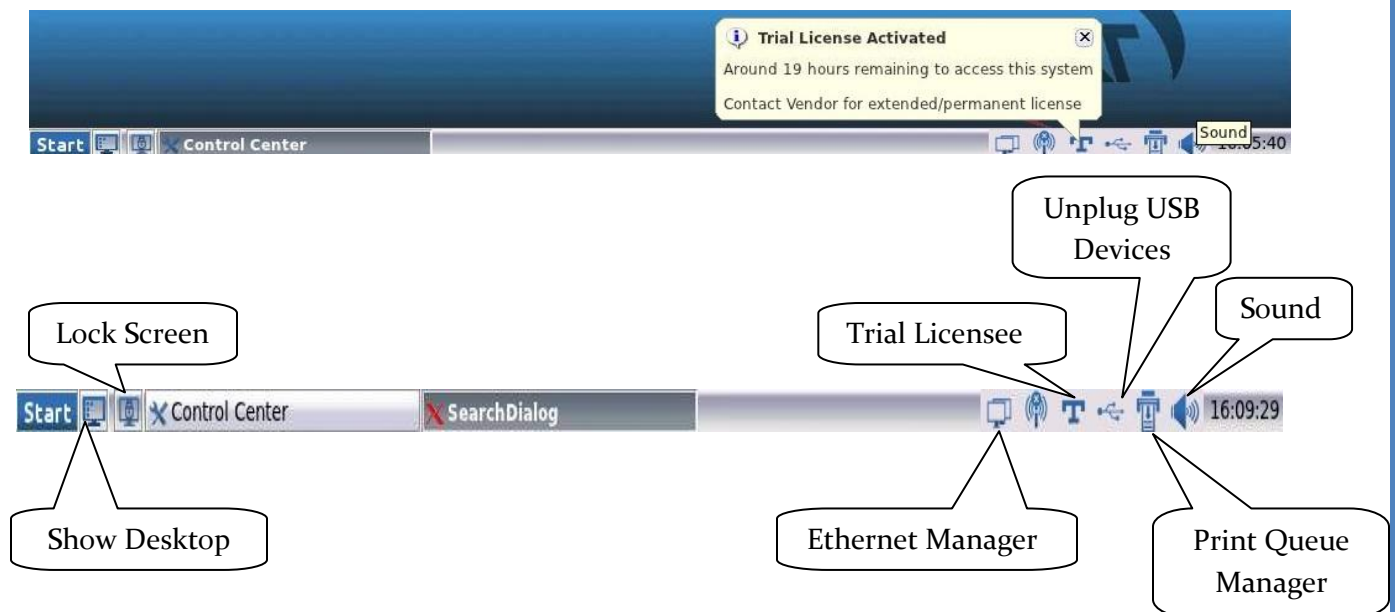
4.8.3.1 Desktop mode

If you are using Desktop mode of user interface, after you login desktop appears on screen with a taskbar and icon for Control Center.



4.8.3.2 Taskbar Utilities

Task bar is always visible by default. You can make it auto hide from User Interface by disabling the feature. User can invoke Connections, Applications, and can do Reboot and Shutdown operations from Start button. There are Four Shortcut buttons on the taskbar like Show Desktop Key, Lock Screen, Unplug USB Devices, Sound, Ethernet Manager and Print Queue.



The following are the icons present on the taskbar.

1. Show Desktop -

If Applications are open and you want to go back to the desktop screen, click on the Show Desktop option. It will minimize all the open application and desktop will displayed.

2. Lock Screen –

Lock screen is used to lock your Desktop.

3. Unplug USB Device -

If you have connected a removable hardware device like USB pen drive. In order to unplug the removable device, click on this Button.

4. Trial License –

By default OS is with 20 hrs trial license. User can update the license by clicking on icon of Trial License on the task bar.

5. Sound -

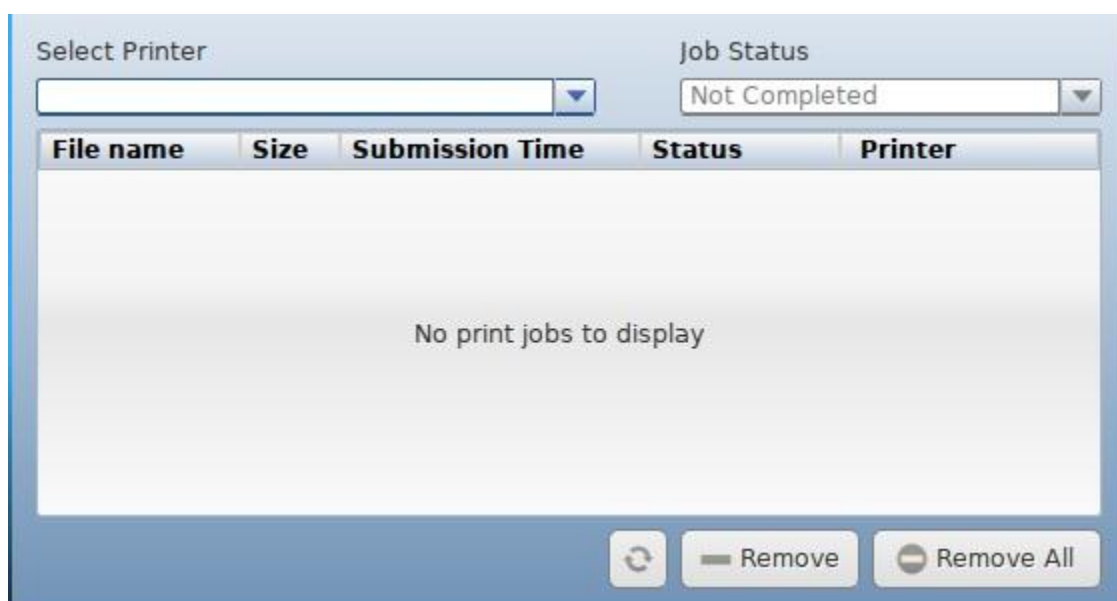
Sound Button is used to adjust the volume level.

6. Start menu -

In the Start menu we can see the list of local application, list of added connections, Connection manager, Control Center, Reboot and Shutdown. One can choose these options using mouse click or keyboard.

7. Print Queue Manager –

Print Queue Manager is a printer queue controller for local or remote printers. All the completed and non completed jobs will be listed here.



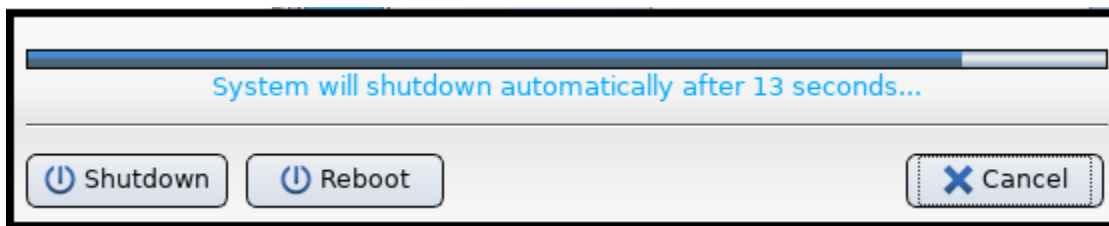
4.8.3.1 Kiosk mode

- If you are using kiosk mode of user interface then after you login, the Connection Manager will appear on screen.
- Using connection manager you can add, edit, delete and connect to different connections like RDP, ICA and VNC etc. (for details on connections please read section no 6. Connection Manager.)
- User can change other settings like Printing, Network, and Administration by clicking **Control Center**.
- If you want to switch to **Desktop mode**, click on Control Center; go to **Appearance → User Interface → Mode → Desktop**. Select mode as Desktop option. Then click on Apply. The changes will be effective on the fly.

- There are Four Shortcut buttons on the taskbar like Unplug USB Devices, Sound, Ethernet Manager, and Reboot icons.



- If you click on Close button in Connection Manager, System will perform the actions which are set in Shutdown Procedure UI.
If Prompt user option is selected then the below window will be opened. Here system will shutdown automatically. You can reboot the system or cancel the action by clicking respective button before system shutdown.

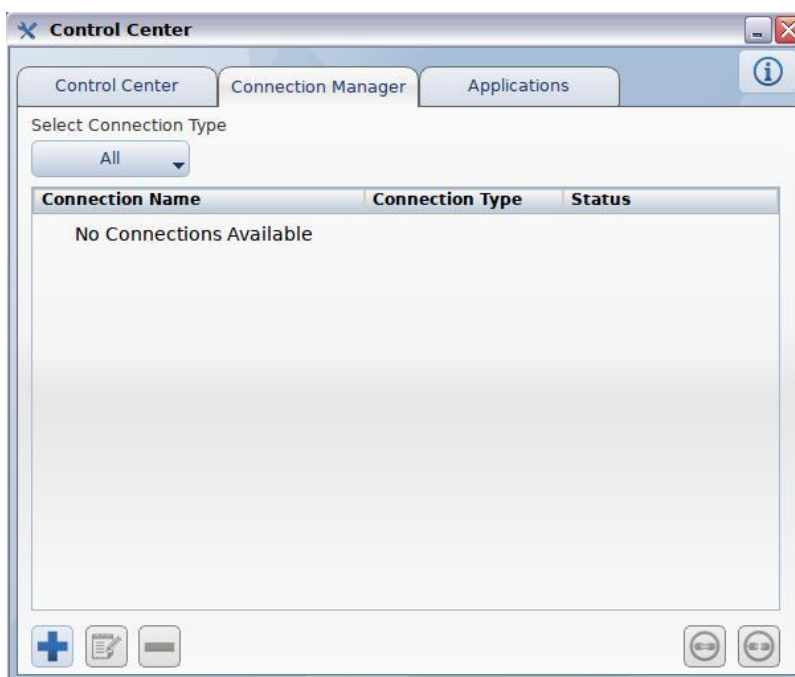


- If Always shutdown option is selected in as a shutdown procedure then the system will shutdown automatically.
- If Always Reboot option is selected in as a shutdown procedure then the system will reboot automatically.

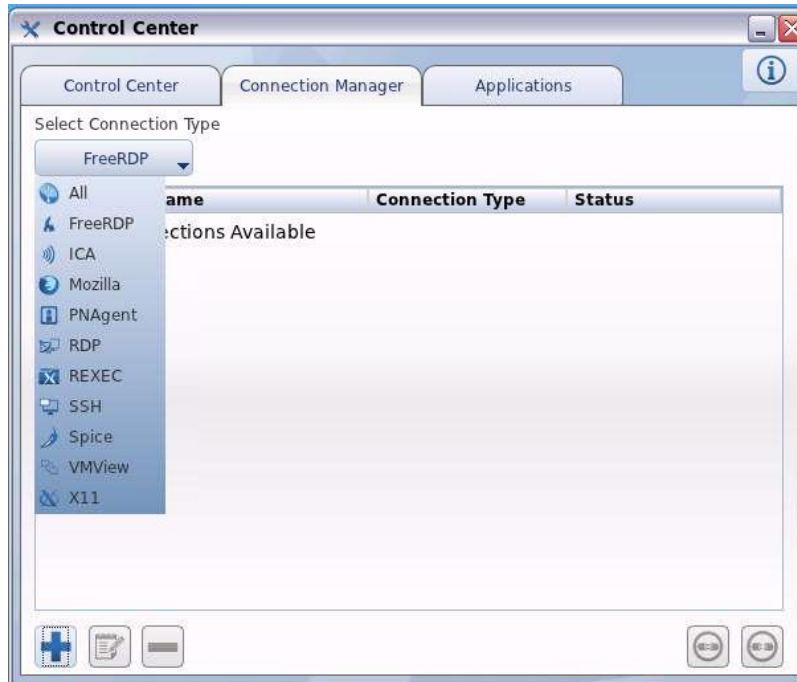


5. Connection Manager

Connection Manager consists of Add button, Edit button, Delete button, Connect button, Disconnect button, Close button, and a list area (tree view) where all available connection are displayed. Since no connections are present, it is showing No Connection Available.



List of Connection Type:



User can also add connection by clicking on the + (ADD) button. The list of connection type will be shown. Select the required type and do the configuration for the connection. Apply the settings and click on Connect. Connection will be launched.

5.1 Adding a FreeRDP connection

FreeRDP is a free, open source implementation of the RDP protocol.

General:

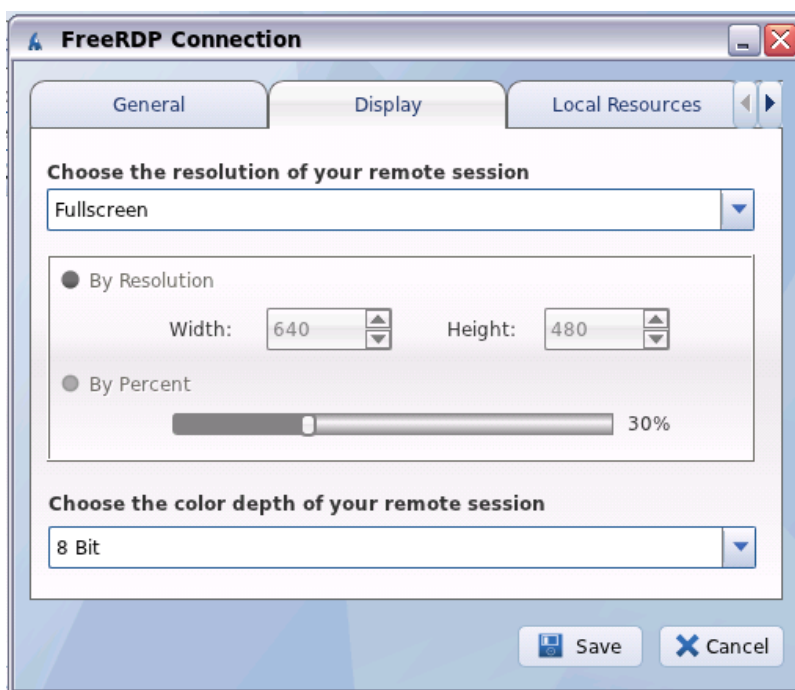
- Input server IP address manually.
- Input Connection name.
- Input proper user name and password.
- Input Domain name.
- Enable/Disable Remote FX.

Note: If RemoteFX is enabled then color depth has to be 32bit locally.



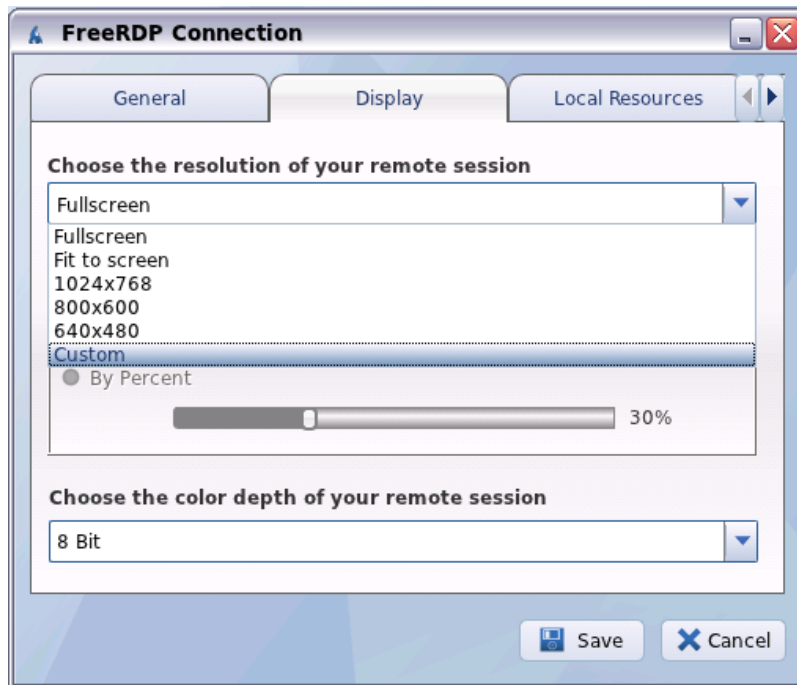
Display:

User can perform settings for the Color Depth, Resolution.



Resolution List:

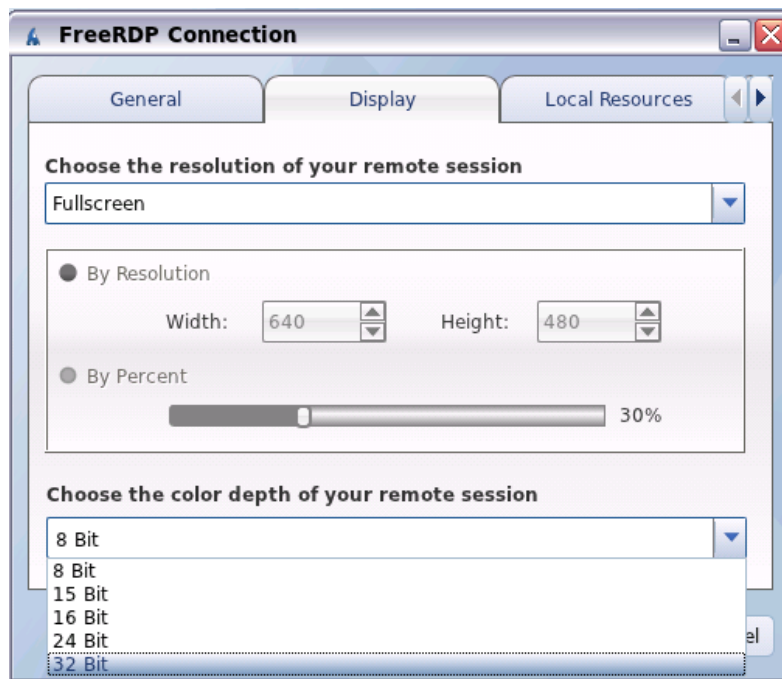
User can select the required resolution from the list. The RDP connection will be launched with selected resolution



Resolution can be customized according to the requirement. Choose Custom option from the resolution list and configure the settings.

Color Depth:

Select the required color depth for the connection. The connection will be launched with the selected color depth.



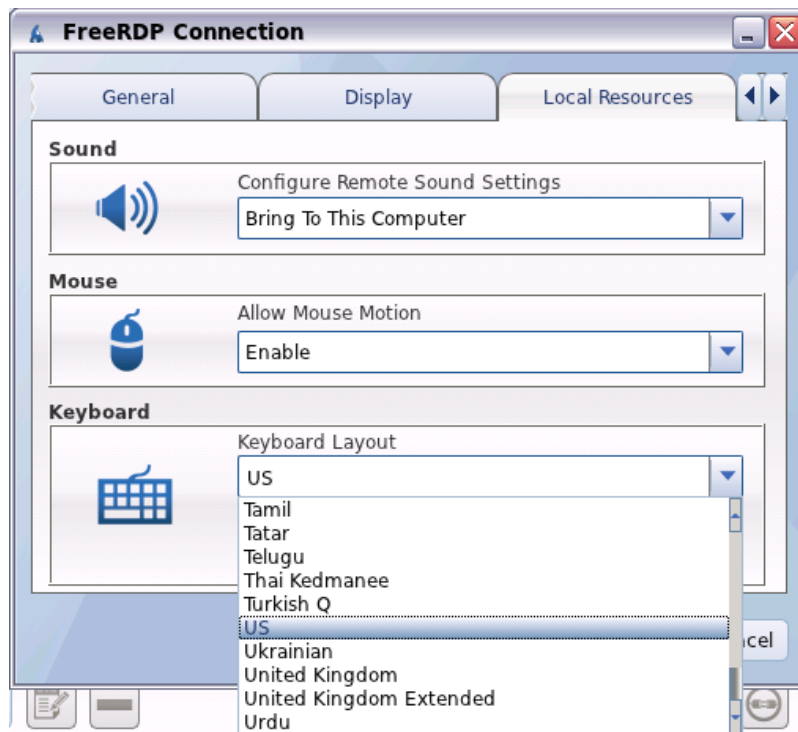
Local Resources:

User can set the Keyboard Layouts, Configure Sound Settings and map key bindings.



Keyboard Layout:

User can select the Keyboard Type from the Type drop down list and apply. The settings will be applied on the fly.



Keep Window Manager Key Bindings:



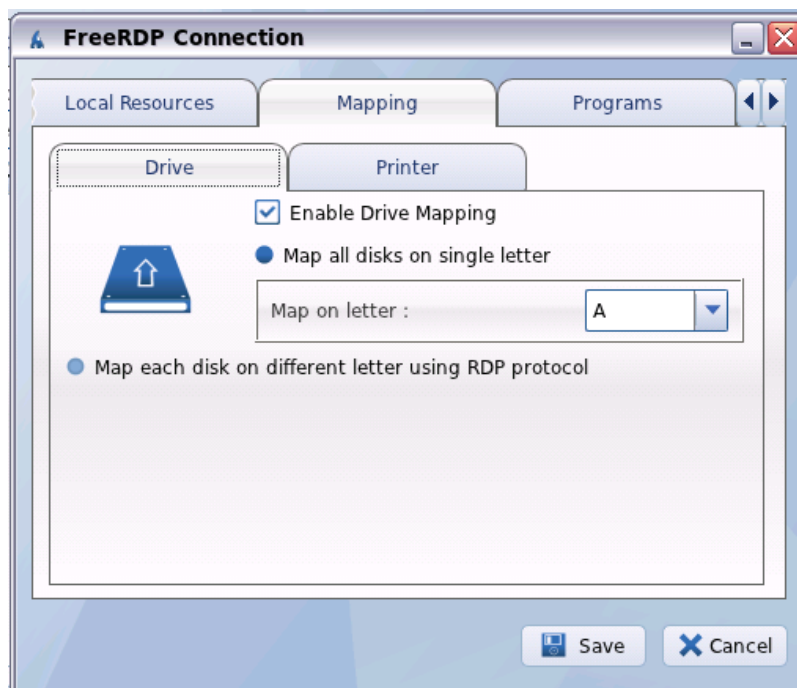
Mouse:

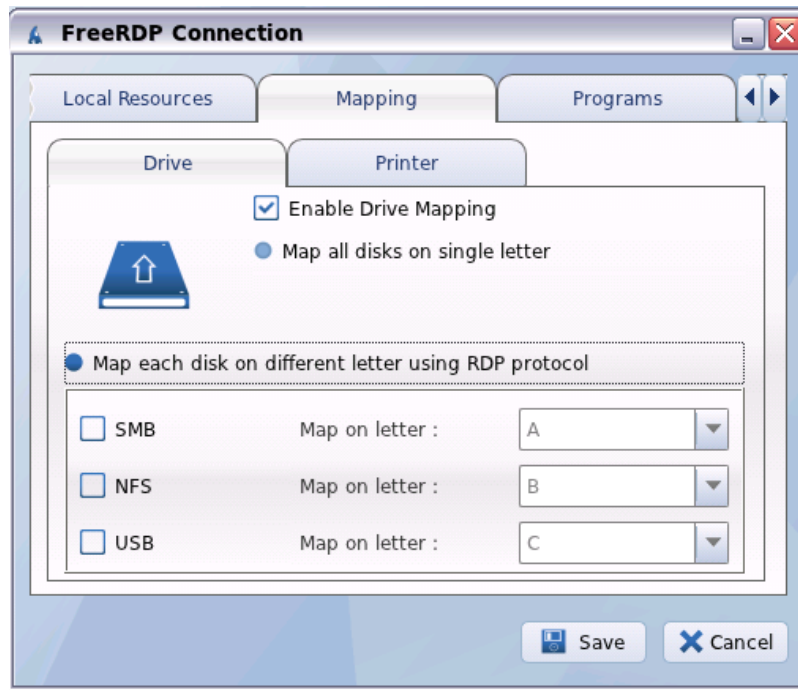
User can select the motion of the mouse by enabling or disabling option, and it will affect the Free RDP Connection.



Mapping – Drive:

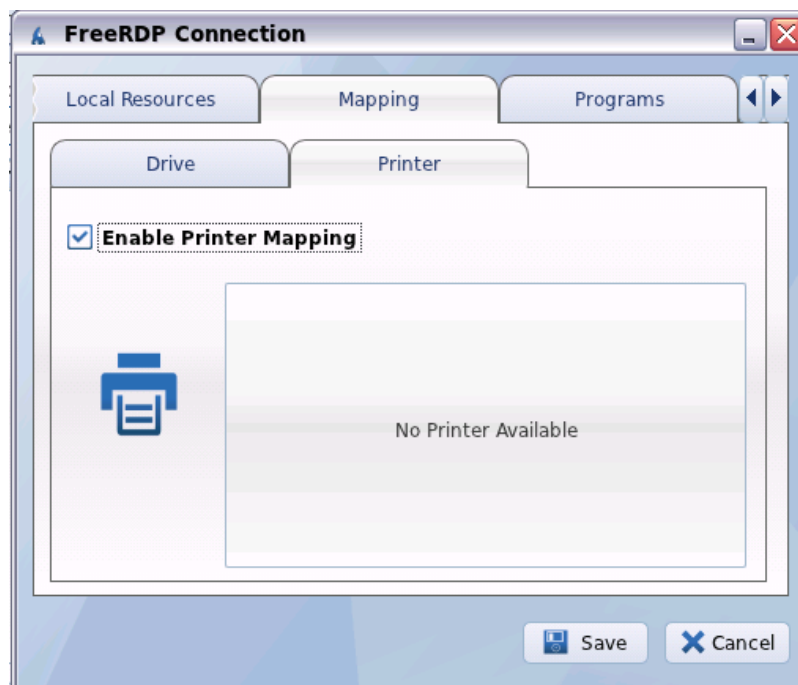
User can assign different characters for mapping of different disks and assign single character for all disks in this tab. Local storage (SMB, NFS, and Local USB) should be mounted in RDP session with single or different assigned letters.





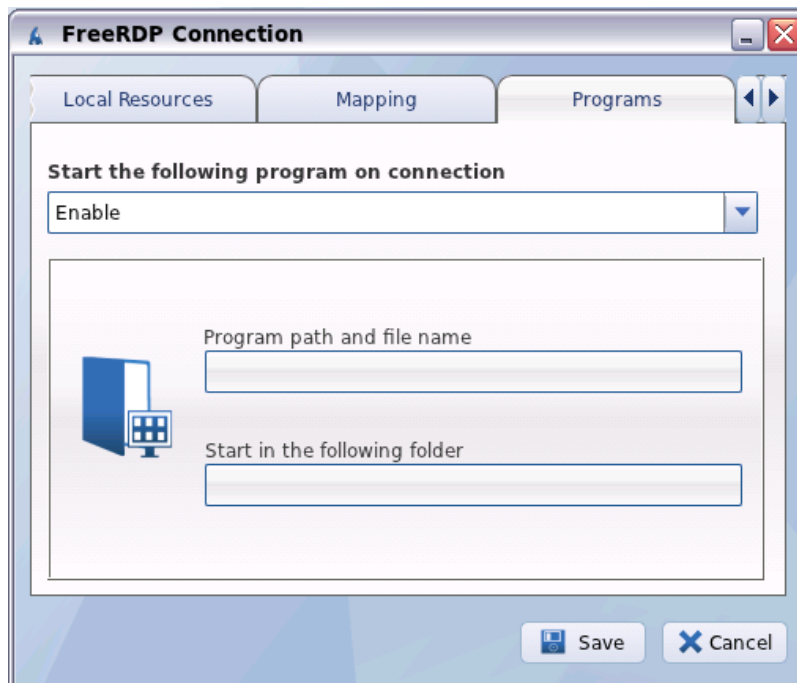
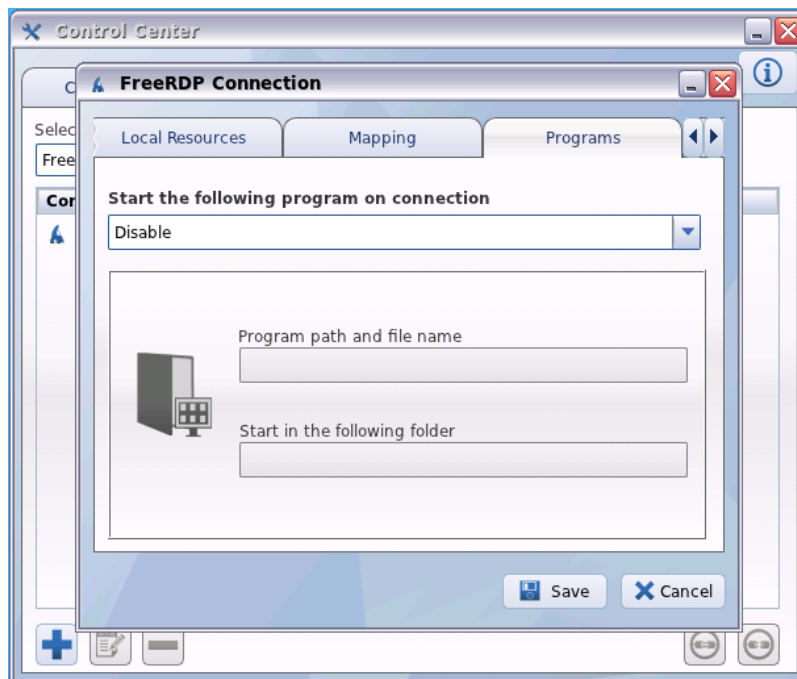
Mapping – Printer:

To use printer, enable this option. After this setting, the printer will be redirected in the RDP session. Applications running within a remote desktop session can print to a printer attached to the client device. To redirect more than one printer, select the appropriate printer from the available added printer list. Disable the printer mapping option, if user does not want to redirect the connected printer



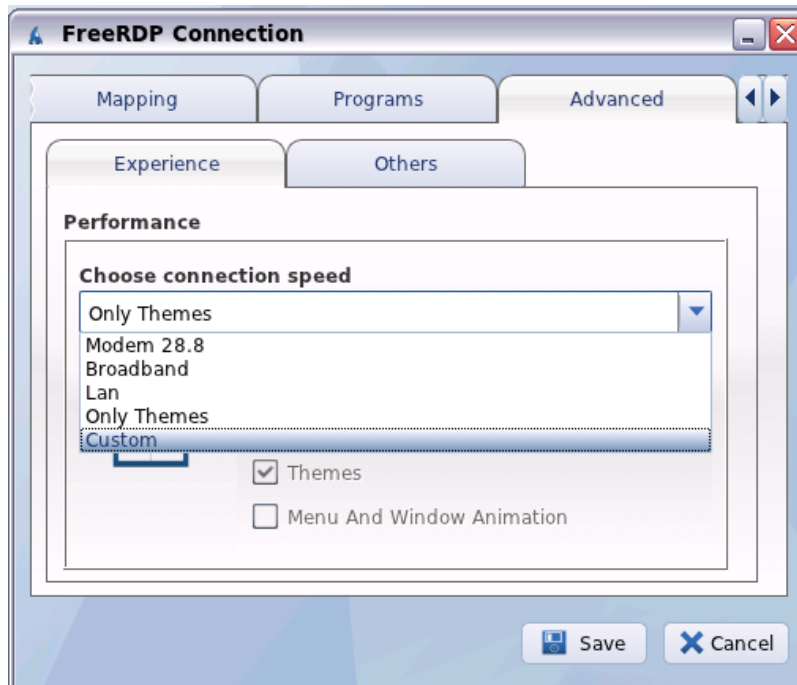
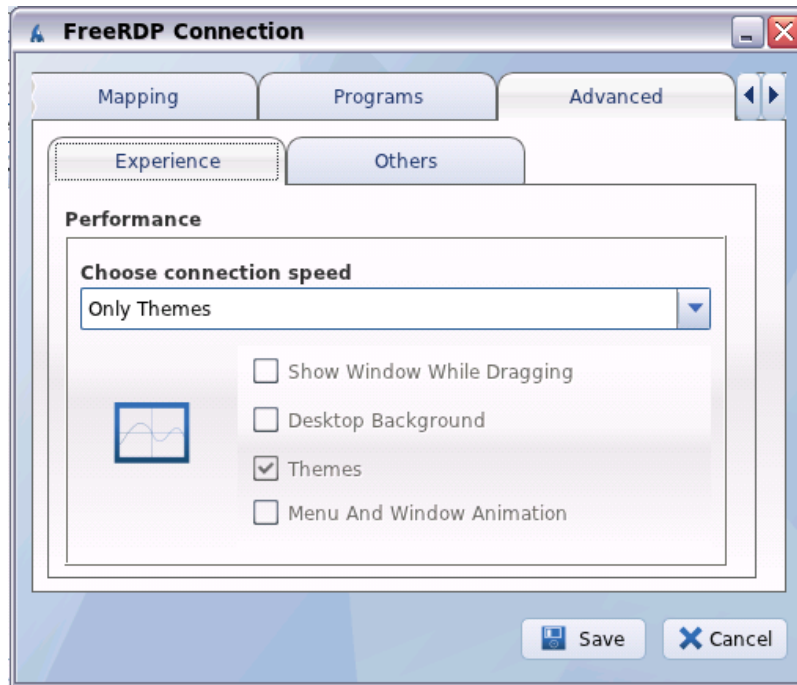
Programs:

Input Path of Application (exe path) in Program Path and the file name if you want to invoke particular application. After this if you connect to RDP session only your specified Application will invoke. This will act as a default application.



Advanced – Experience:

The settings on this tab allow you to disable certain features to improve performance or enable features to improve the appearance of the remote desktop. As indicated, select your connection speed to optimize performance.



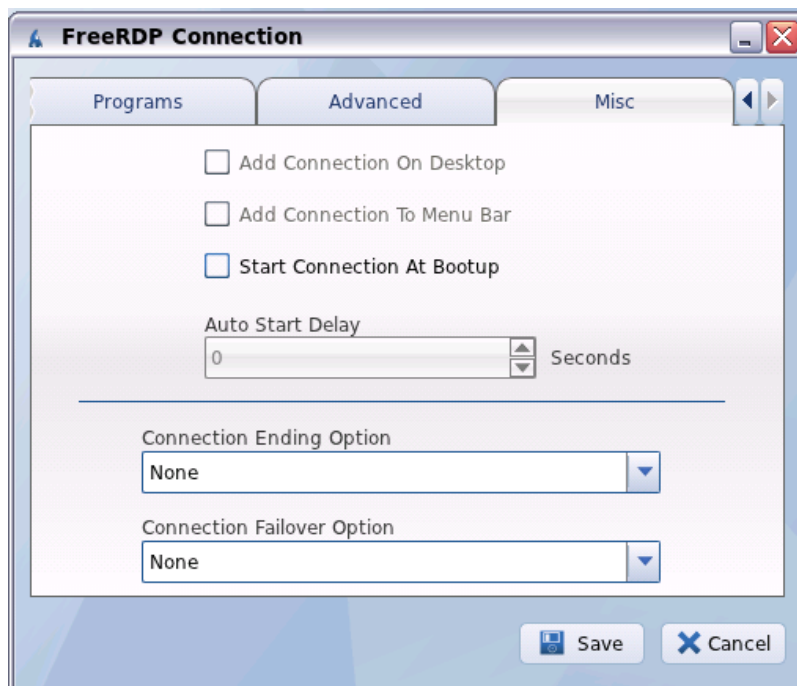
Advanced – Others:

The settings on this tab allow you to configure features such as Encryption, RDP Protocol Version etc. of RDP protocol.



Misc:

The settings on this tab allow you to configure miscellaneous features for connection.



5.2 Adding a ICA connection

Select connection type as 'ICA'.

By default all the settings are set to default, which user has configured in the ICA global settings. User can use default global settings or configure individual settings for the respective connection.

Login:

1. User can search ICA server in the network using this option. For searching ICA servers in network click on Search icon. ICA Server list will be displayed. Then choose the appropriate ICA server to connect. Or Input server IP address manually.
2. Input Connection name.
3. Input proper user name and password.

The screenshot shows the 'ICA Connection' dialog box with the 'Login' tab selected. The dialog has three tabs: 'Login', 'Network', and 'Connection'. The 'Login' tab contains the following fields and controls:

- Server:** A dropdown menu with a search icon to its right.
- Server Location:** A text input field.
- Username:** A text input field.
- Password:** A text input field.
- Domain:** A text input field.
- Application:** A dropdown menu with a search icon to its right.
- Single Sign On:** A checkbox.
- Connection Name:** A text input field.

At the bottom right of the dialog are 'Save' and 'Cancel' buttons.

Depending on the selected server, the applications launched on the server will be listed in Application list. If any application is selected, the connection will directly launch the application.

Network: User can select the Network Protocol for the ICA server and also specify the working directory.



The image shows the 'ICA Connection' dialog box with the 'Network' tab selected. The 'Login' tab is also visible. The 'Network Protocol' dropdown is set to 'Use Global'. The 'Working Directory' field is empty. The 'Citrix Secure Gateway' section contains 'Secure Gateway Address' and 'Port' fields, both of which are empty. At the bottom right, there are 'Save' and 'Cancel' buttons.

Connection – Devices:

User can perform Sound settings, audio input settings, drive mapping settings, Data compression, Disk Cache settings.

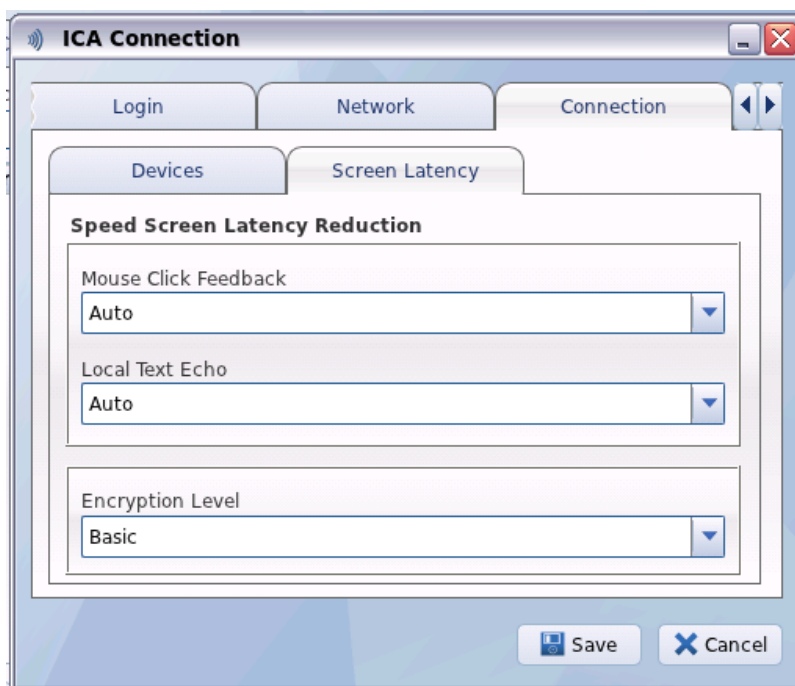


The image shows the 'ICA Connection' dialog box with the 'Connection' tab selected. The 'Login' and 'Network' tabs are also visible. The 'Devices' sub-tab is selected, showing the 'Sound' section. The 'Enable Sound' checkbox is checked, and the 'Quality' dropdown is set to 'Medium'. The 'Audio Input' dropdown is set to 'Use Global'. The 'Drive Mapping' dropdown is set to 'Use Global'. There are four unchecked checkboxes: 'Use Data Compression', 'Enable Middle Button Paste', and 'Use Disk Cache For Bitmaps'. At the bottom right, there are 'Save' and 'Cancel' buttons.



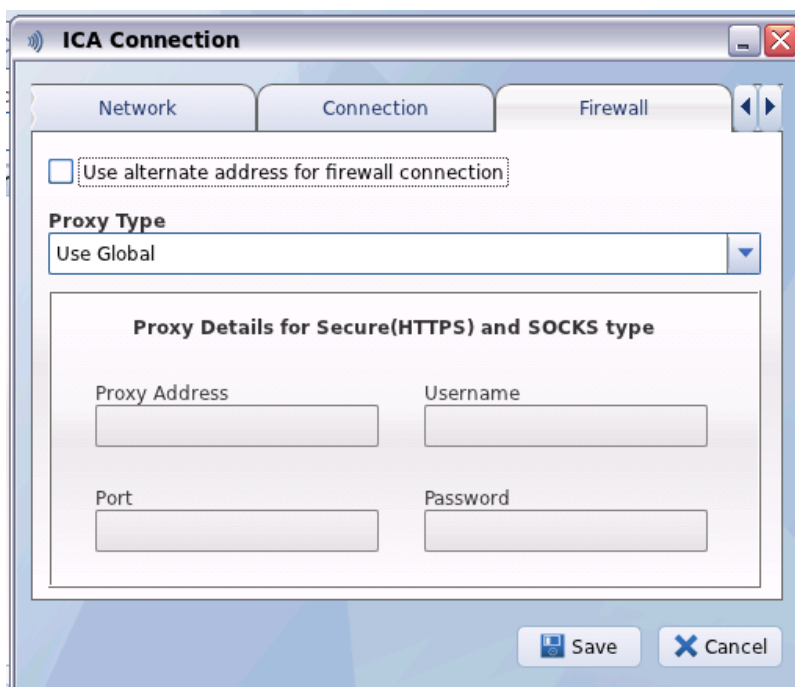
Connection – Screen Latency:

User can configure settings for Mouse Click Feedback, Local Text Echo and Encryption Level from this tab.



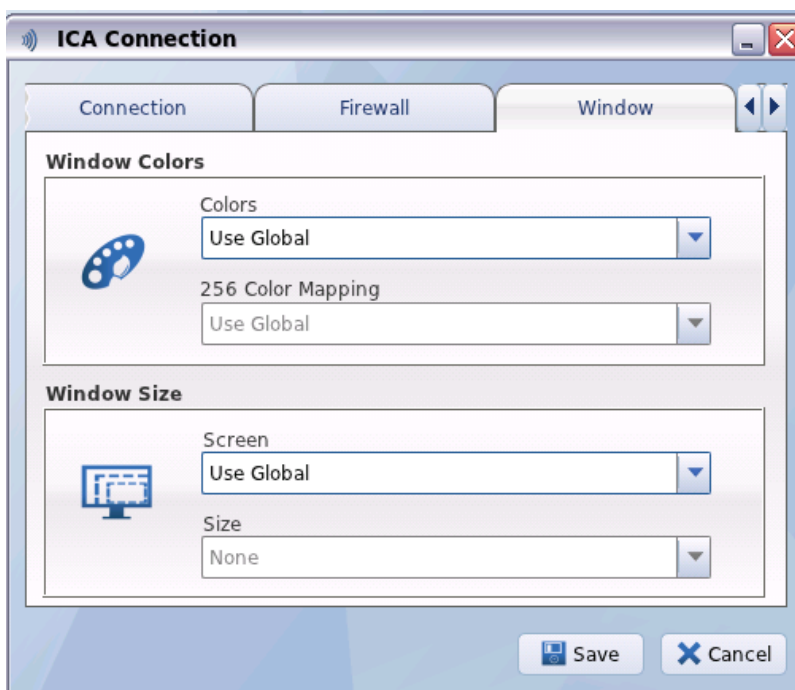
Firewall:

If end-users will be connecting to the ICA Server via the Internet, then firewall settings are necessary. User can select the proxy settings from the Proxy Mode drop down list.



Window:

- User can select Screen size as Default/ Fixed Size/ Full Screen/Screen percentage.
- The screen size can also be set to different sizes by selecting Screen percentage in Screen Size which enables the Size drop down list. Then select the size from the list. Now the session will appear in the selected size.
- User can change the Window Colors of the session.





Reconnect:

By enabling Auto Reconnect option, user can get the access of ICA session when session is lost due to low connectivity.

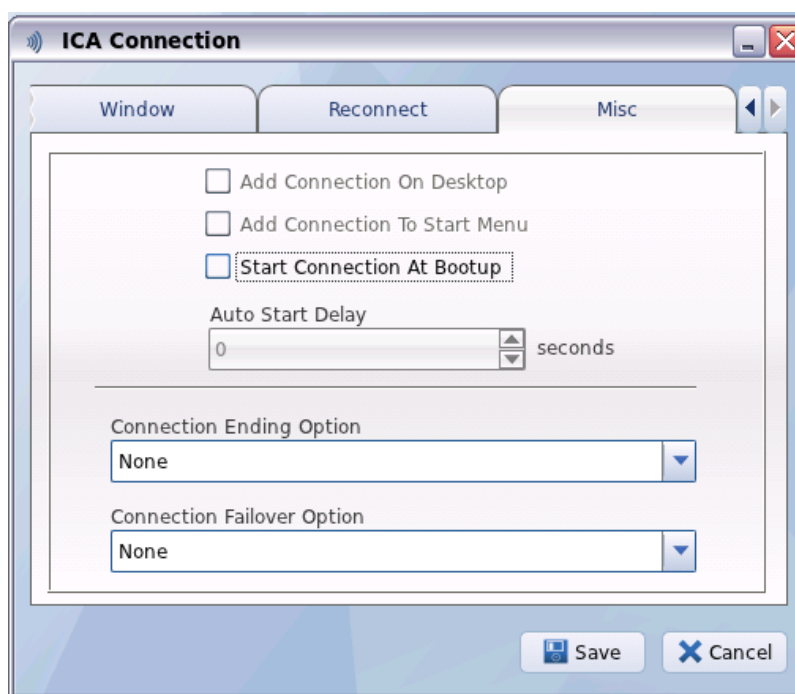


User can set maximum retries for reconnection.



Misc:

The settings on this tab allow you to configure miscellaneous features for connection.



5.3 Adding a Mozilla connection

By default all the settings are set to default, which user has configured in the Browser global settings. User can use default global settings or configure individual settings for the respective connection.

- Select connection type as 'Mozilla'.
- Give appropriate name to connection.
- Enter Webpage URL for browser.
- Select screen size (full screen/fit to screen/default)

Browser Connection

General Misc

Webpage URL

Mode: Use Global

Screen Size: Use Global

Connection Name

Save Cancel

Browser Connection

General Misc

Webpage URL

Mode: Use Global (dropdown menu open showing: Use Global, Normal, Kiosk, Superkiosk)

Screen Size: Use Global

Connection Name

Save Cancel

Mode:

1. **Normal:** In normal mode, Firefox will invoke with Menu bar and Toolbar utilities.
2. **Kiosk:** In Kiosk mode, Firefox will invoke with tool bar only.

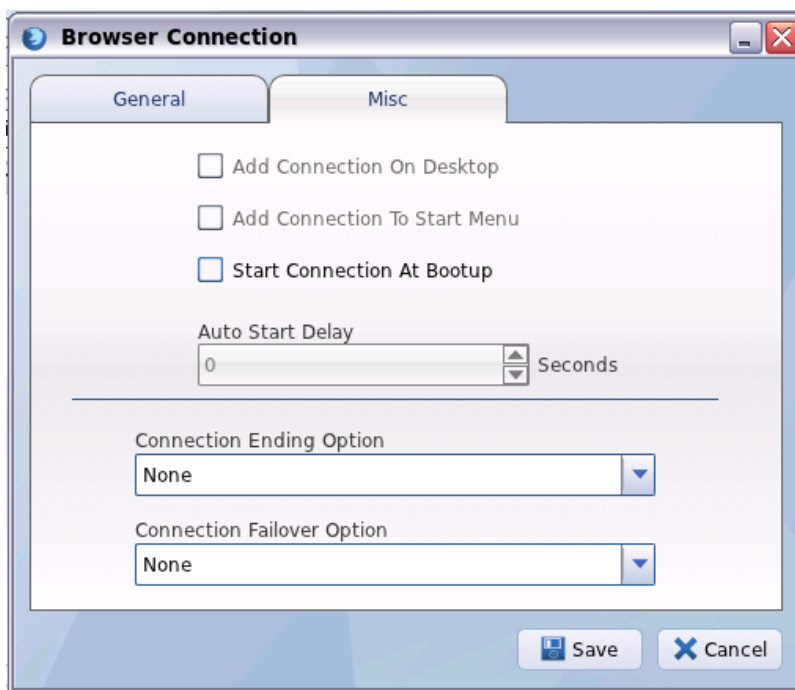
3. **Super Kiosk:** In super kiosk mode, Firefox will invoke in full screen mode, no Menu bar and tool bar will appear.

[Note: Kiosk and Super Kiosk are the customized mode of Firefox.]



Misc:

The settings on this tab allow you to configure miscellaneous features for connection.



5.4 Adding a PNAgent connection

General:

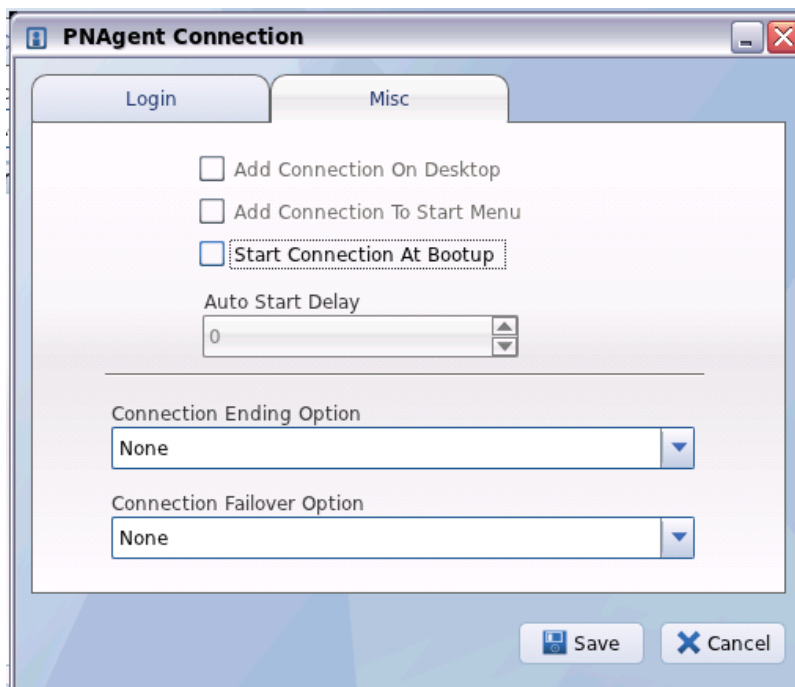
- Select connection type as 'PNAgent'.
- Give appropriate name to connection.
- Enter Server IP.
- Input correct User name and Password.
- Input Domain name.

The screenshot shows a Windows-style dialog box titled "PNAgent Connection". It has two tabs: "Login" and "Misc". The "Login" tab is selected. Inside the "Login" tab, there are several input fields: "Server", "Port", "Username", "Password", and "Domain". To the right of the "Domain" field is a "Launch Application" dropdown menu with a search icon. Below these fields are two checkboxes: "Display Apps on Desktop" and "Single Sign On". At the bottom of the dialog, there is a "Connection Name" field and two buttons: "Save" and "Cancel".

- If you have checked "Display Application Icons on Desktop" check box, you will get Icons of the published applications on desktop. If you uncheck this option then all the published applications will be displayed in connection manager associated with Particular created connection.

Misc:

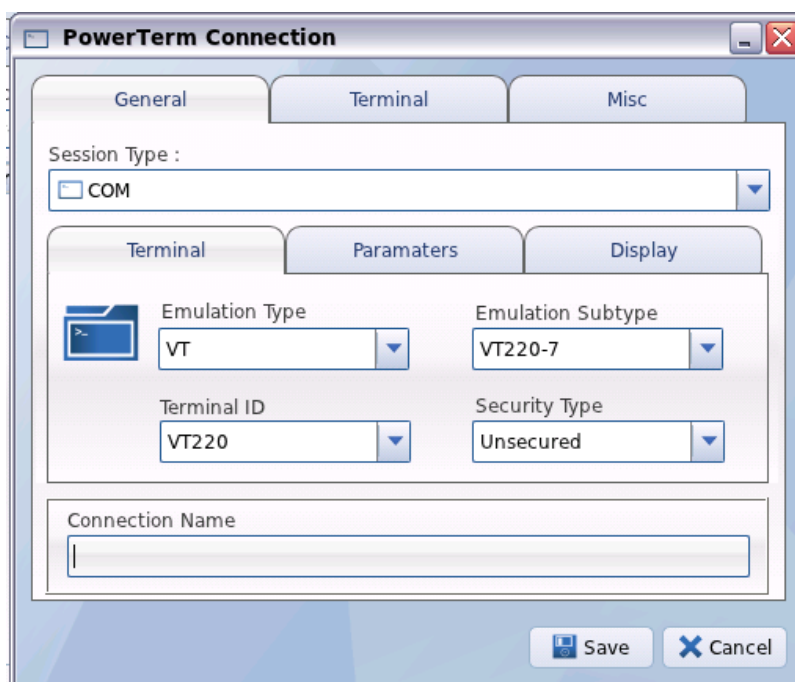
The settings on this tab allow you to configure miscellaneous features for connection.



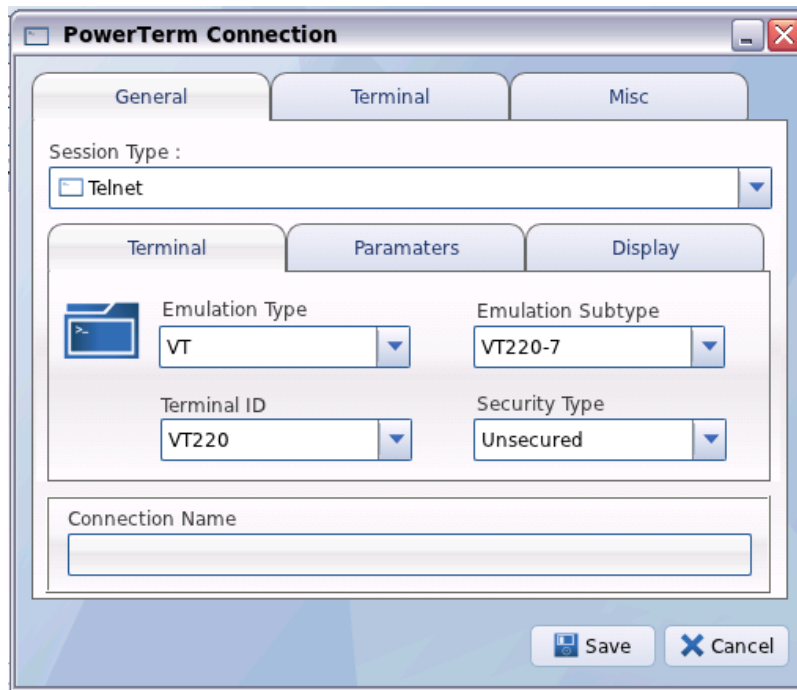
5.5 Adding an Powerterm connection

Select connection type as 'Powerterm'. User can select the desired Session Type from the list.

Session Type: COM



Session Type: Telnet



5.6 Adding an RDP connection

Select connection type as 'RDP'.

By default all the settings are set to default, which user has configured in the RDP global settings. User can use default global settings or configure individual settings for the respective connection.

General:

- User can search RDP server in the network using this option. For searching RDP servers in network click on Search icon. RDP Server list will be displayed. Then choose the appropriate RDP server to connect. Or Input server IP address manually.
- Input Connection name.
- Input proper user name and password.
- Input Domain name.

The screenshot shows the 'RDP Connection' dialog box with the 'General' tab selected. The dialog has three tabs: 'General', 'Display', and 'Local Resources'. The 'General' tab contains the following fields and options:

- Server:** A text input field.
- Port:** A text input field.
- Username:** A text input field.
- Password:** A text input field.
- Domain:** A text input field.
- Single Sign ON:** A checkbox that is currently unchecked.
- Connection Name:** A text input field.

At the bottom right of the dialog are 'Save' and 'Cancel' buttons.

Display:

User can perform settings for the Color Depth, Resolution and Backing Store.

The screenshot shows the 'RDP Connection' dialog box with the 'Display' tab selected. The dialog has three tabs: 'General', 'Display', and 'Local Resources'. The 'Display' tab contains the following settings:

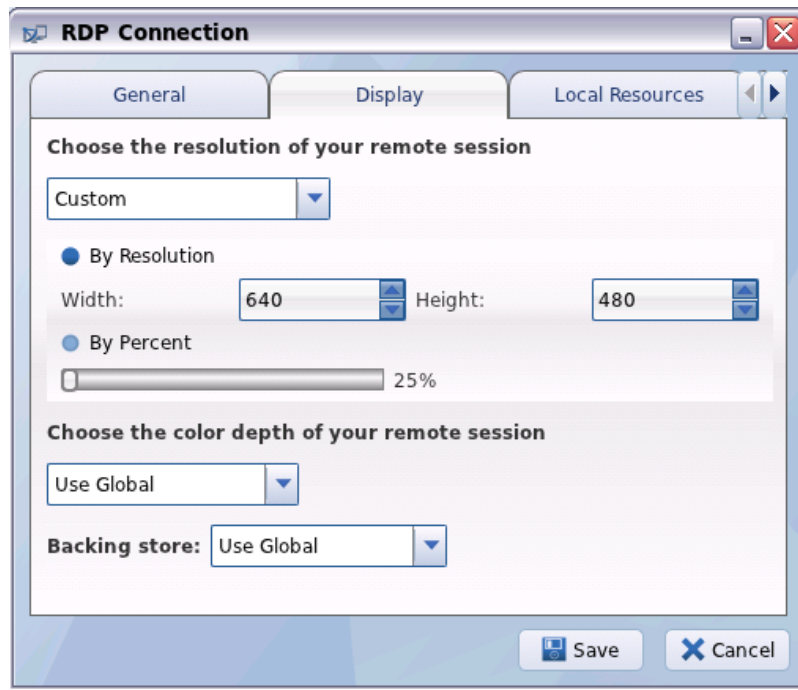
- Choose the resolution of your remote session:** A dropdown menu with 'Use Global' selected.
- Choose the color depth of your remote session:** A dropdown menu with 'Use Global' selected.
- Backing store:** A dropdown menu with 'Use Global' selected.

At the bottom right of the dialog are 'Save' and 'Cancel' buttons.

Resolution List:

User can select the required resolution from the list. The RDP connection will be launched with selected resolution.

Resolution can be customized according to the requirement. Choose Custom option from the resolution list and configure the settings.



Color Depth:

Select the required color depth for the connection. The connection will be launched with the selected color depth.

Local Recourses:

User can set the Keyboard Layouts, Configure Remote Audio Settings and map key bindings.



Audio:

To allow remote audio settings, select the appropriate option from the list.

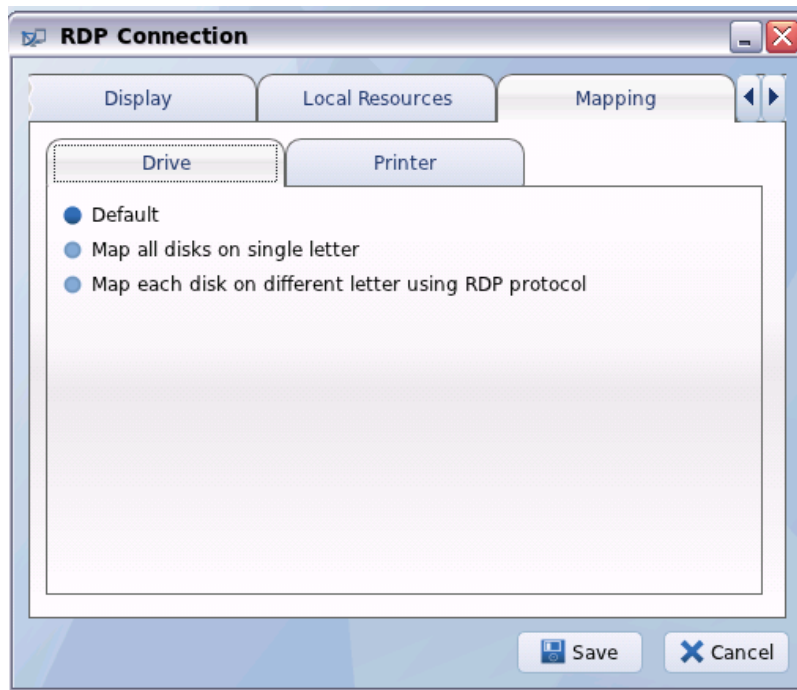
Keyboard Layout:

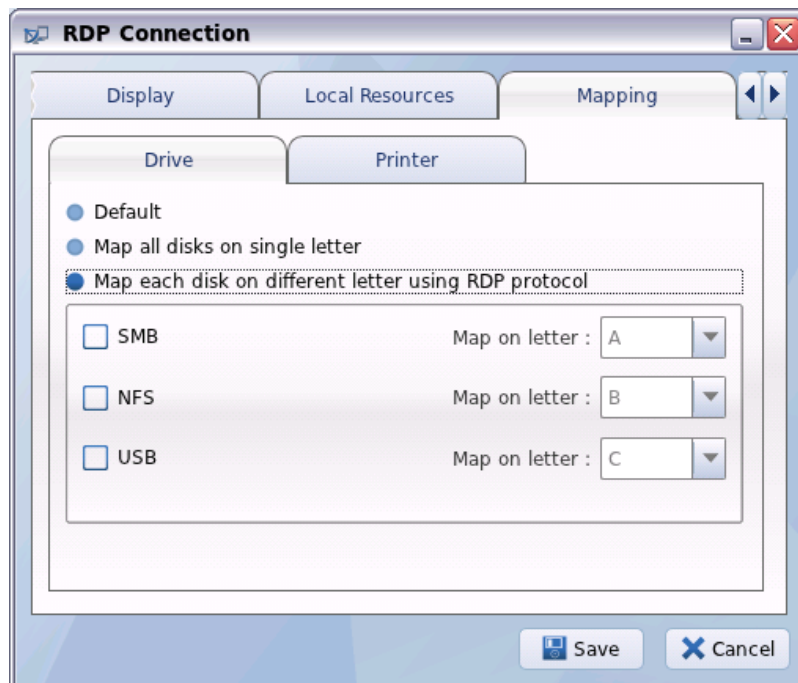
User can select the Keyboard Type from the Type drop down list and apply. The settings will be applied on the fly.

Keep Window Manager Key Bindings:

Mapping – Drive:

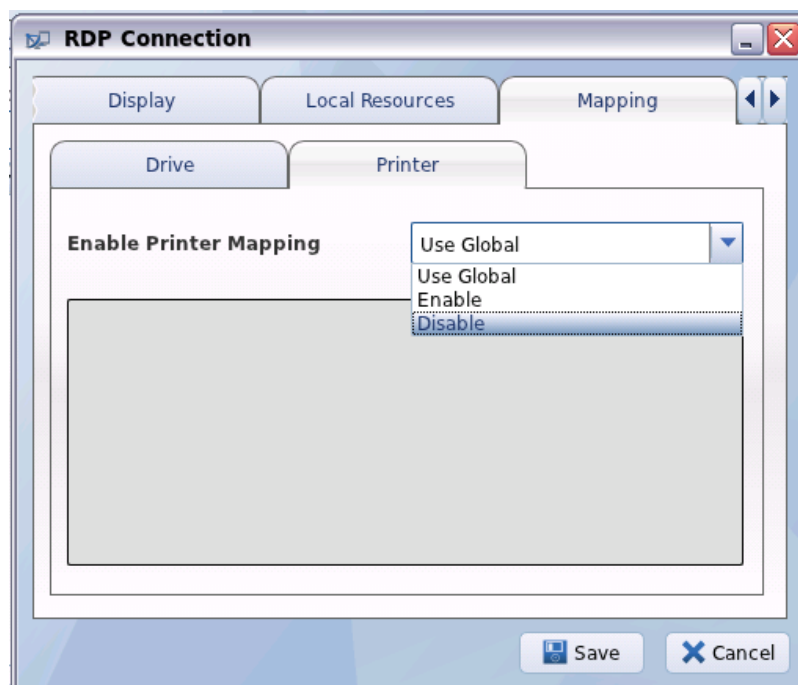
User can assign different characters for mapping of different disks and assign single character for all disks in this tab. Local storage (SMB, NFS, and Local USB) should be mounted in RDP session with single or different assigned letters.





Mapping – Printer:

To use printer, enable this option. After this setting, the printer will be redirected in the RDP session. Applications running within a remote desktop session can print to a printer attached to the client device. To redirect more than one printer, select the appropriate printer from the available added printer list. Disable the printer mapping option, if user does not want to redirect the connected printer.



Programs:

Input Path of Application (exe path) in Program Path and the file name if you want to invoke particular application. After this if you connect to RDP session only your specified Application will invoke. This will act as a default application.



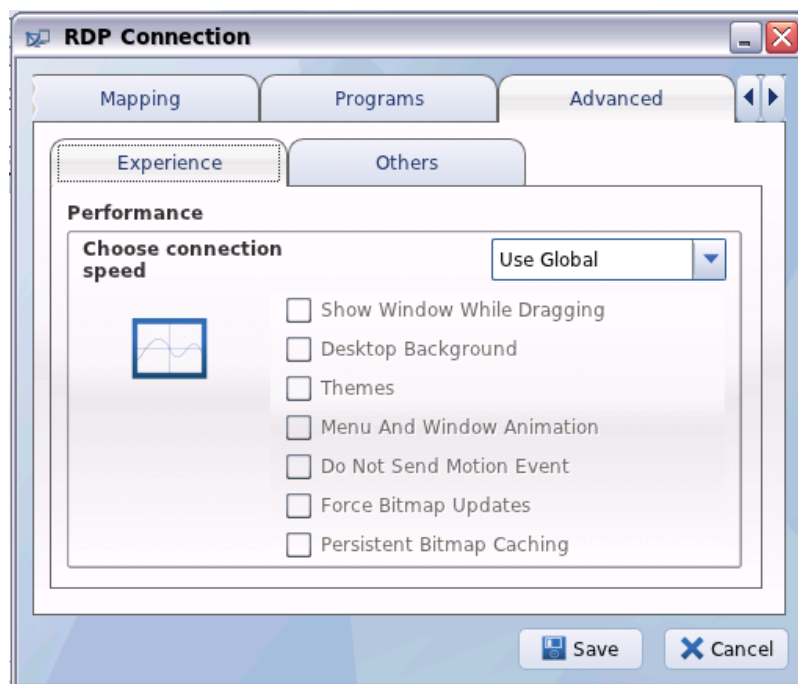
Seamless RDP mode:

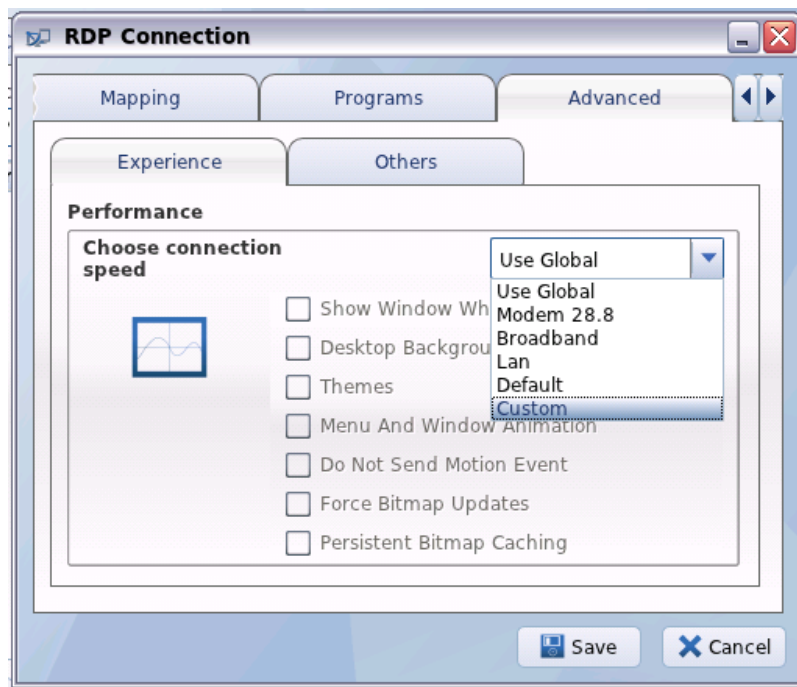
If you want use Seamless RDP mode to invoke the applications of server then enable this option. If you want, the default path then select the “Default path” option or you want to enter the path manually then select the “custom path” option.



Advanced – Experience:

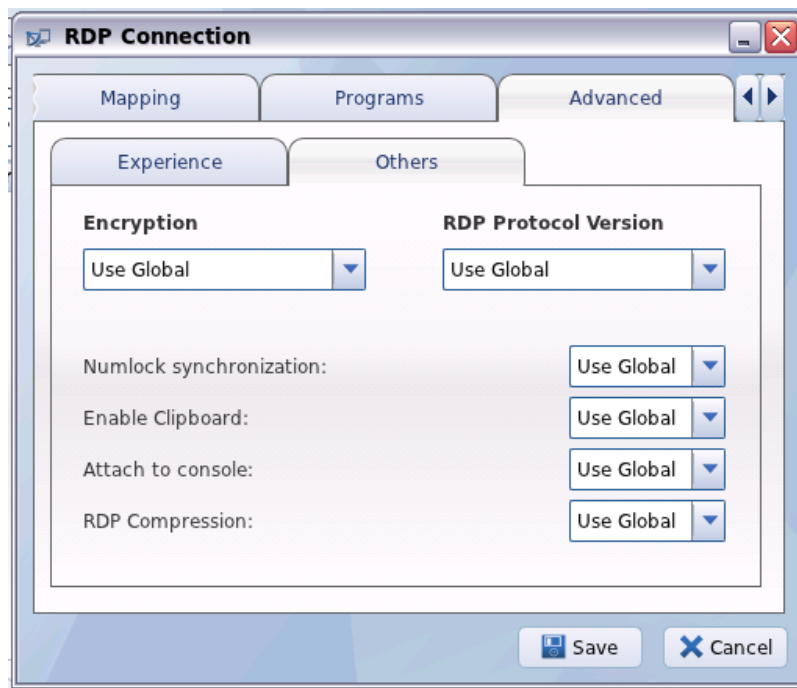
The settings on this tab allow you to disable certain features to improve performance or enable features to improve the appearance of the remote desktop. As indicated, select your connection speed to optimize performance.

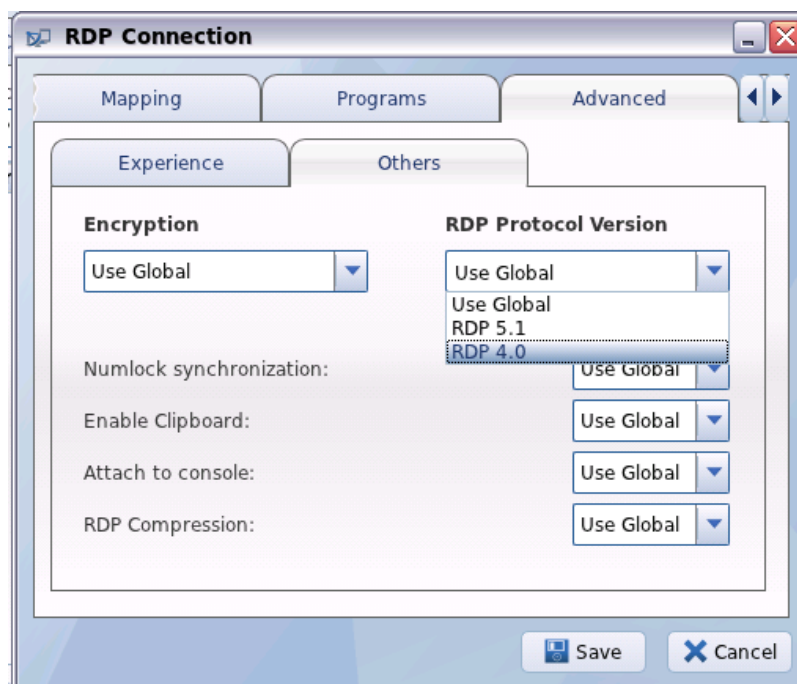




Advanced – Others:

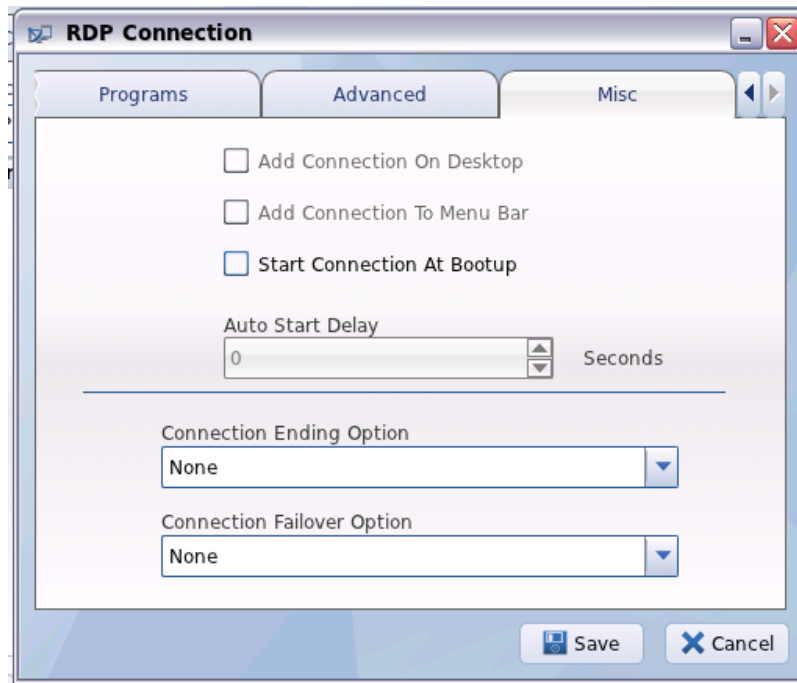
The settings on this tab allow you to configure features such as Encryption, RDP Protocol Version etc. of RDP protocol.





Misc:

The settings on this tab allow you to configure miscellaneous features for connection.



5.8. Adding a REXEC connection

In REXEC Connection, user can use applications installed on REXEC server, invoking them on client side.



Misc:



5.7 Adding a VMView connection

VMView provides remote desktop capabilities to users using VMware's virtualization technology. The VMView provides the virtual desktops to users.

- Select connection type as 'VMView'.
- Input connection name.
- Enter Server IP to which Connection is to be added.
- Select Protocol (PCOIP/RDP).
- Give Desktop Name if you want to directly connect to that desktop otherwise list of available desktop will display.
- Input Domain Name.
- Input User name & Password.

The screenshot shows a 'VMView Connection' dialog box with three tabs: 'General', 'Display', and 'Misc'. The 'General' tab is active. It contains the following fields and controls:

- Server:** A text input field.
- Port:** A text input field containing the value '443'.
- Protocol:** A dropdown menu with 'PCOIP' selected.
- Username:** A text input field.
- Password:** A text input field.
- Desktop Name:** A text input field.
- Domain:** A text input field.
- Use SSL:** A checked checkbox.
- Connection Name:** A text input field.
- Buttons:** 'Save' and 'Cancel' buttons at the bottom right.

PCOIP:

PCoIP is a display protocol that allows complete compression of a desktop which is then displayed through a zero client device over a standard IP network.

User can enable or disable SSL port for desktop connectivity.

The screenshot shows the 'VMView Connection' dialog box with the 'General' tab selected. The dialog has three tabs: 'General', 'Display', and 'Misc'. The 'General' tab contains the following fields and options:

- Server:** A text input field.
- Port:** A text input field containing '443'.
- Protocol:** A dropdown menu showing 'PCOIP'.
- Username:** A text input field.
- Password:** A text input field.
- Desktop Name:** A text input field.
- Domain:** A text input field.
- Use SSL:** A checked checkbox.
- Connection Name:** A text input field.

At the bottom right, there are 'Save' and 'Cancel' buttons.

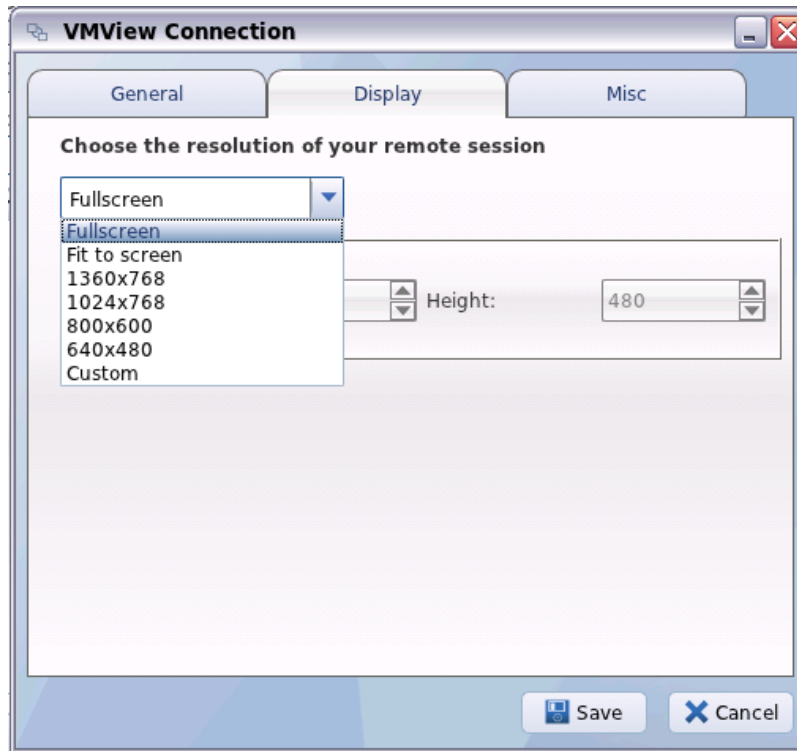
Display:

The Setting on this tab allows you to configure the display area of the VMware view client, as full screen or customized resolution.

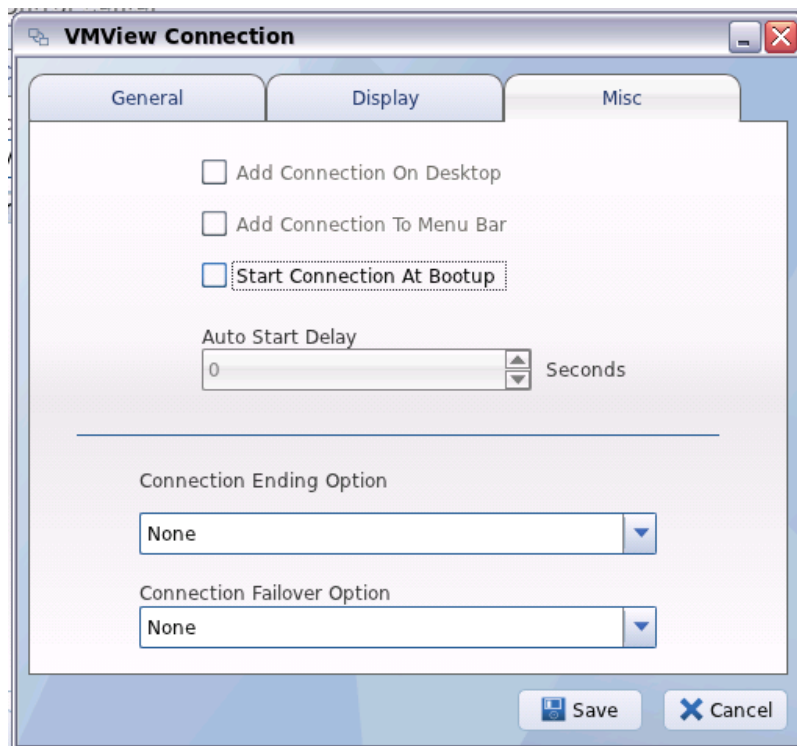
The screenshot shows the 'VMView Connection' dialog box with the 'Display' tab selected. The dialog has three tabs: 'General', 'Display', and 'Misc'. The 'Display' tab contains the following settings:

- Choose the resolution of your remote session:** A dropdown menu showing 'Fullscreen'.
- By Resolution:** A radio button that is selected.
- Width:** A text input field containing '640'.
- Height:** A text input field containing '480'.

At the bottom right, there are 'Save' and 'Cancel' buttons.

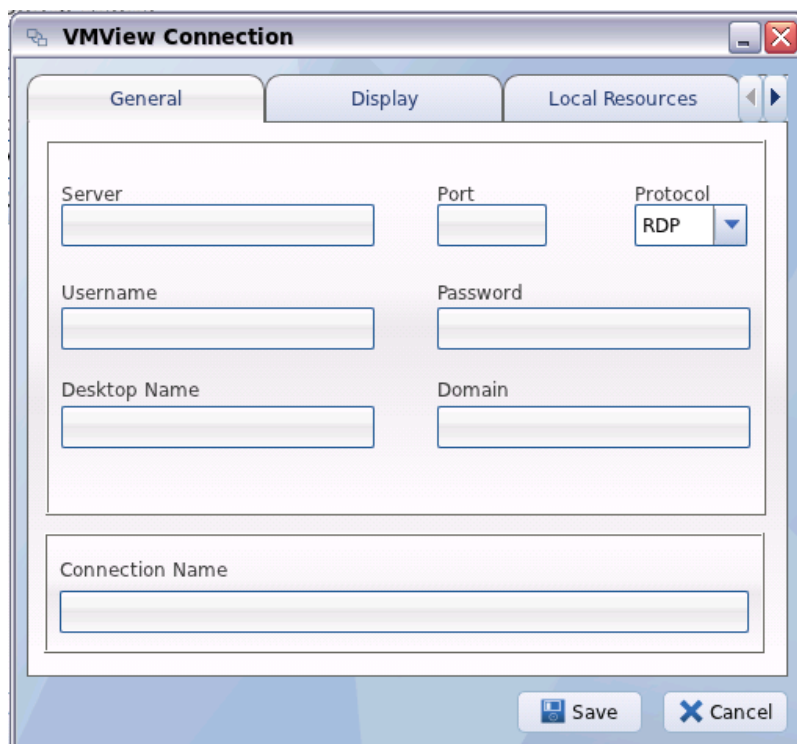
**Misc:**

The settings on this tab allow you to configure miscellaneous features for connection.

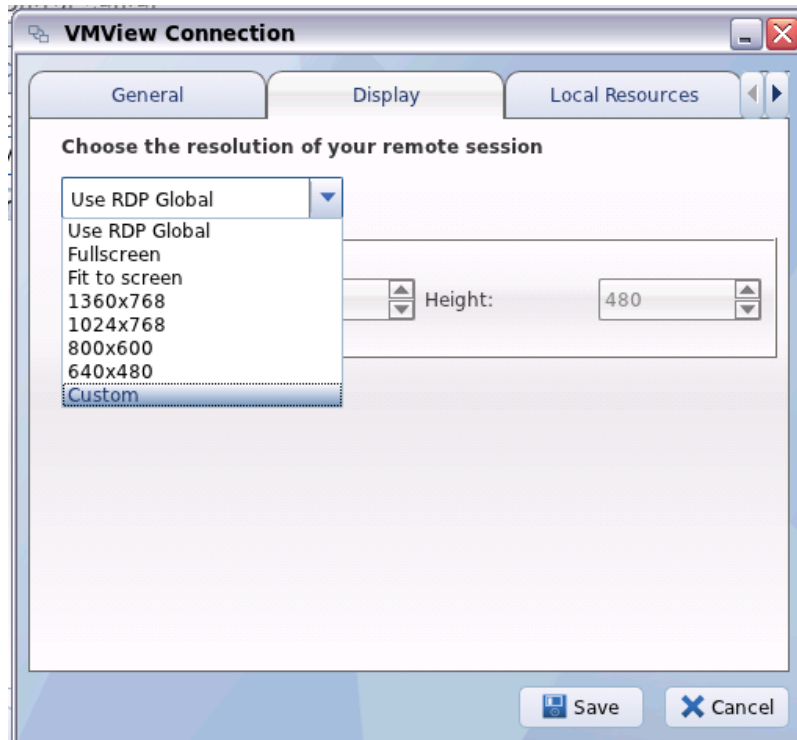


RDP Protocol:

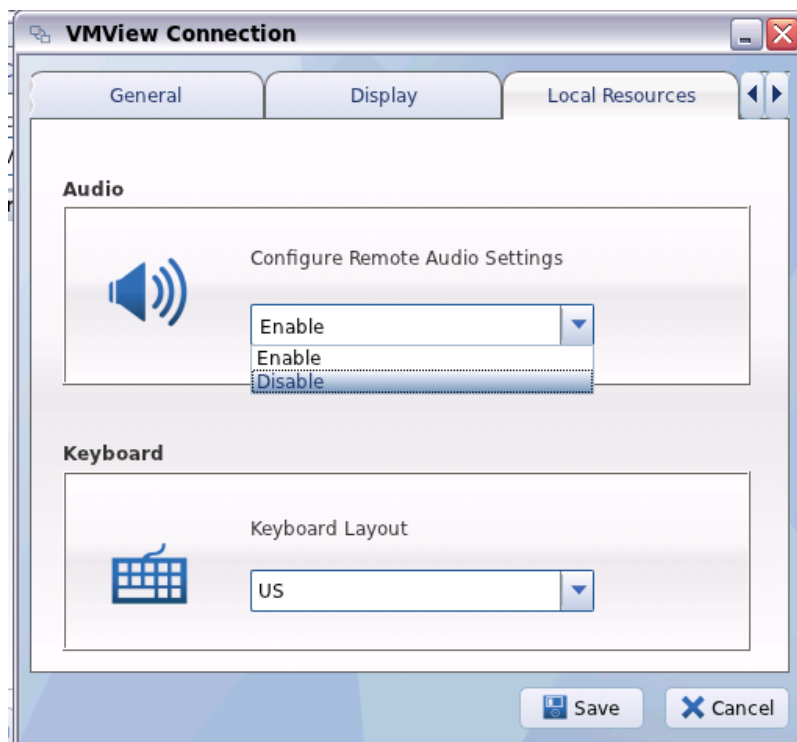
General:

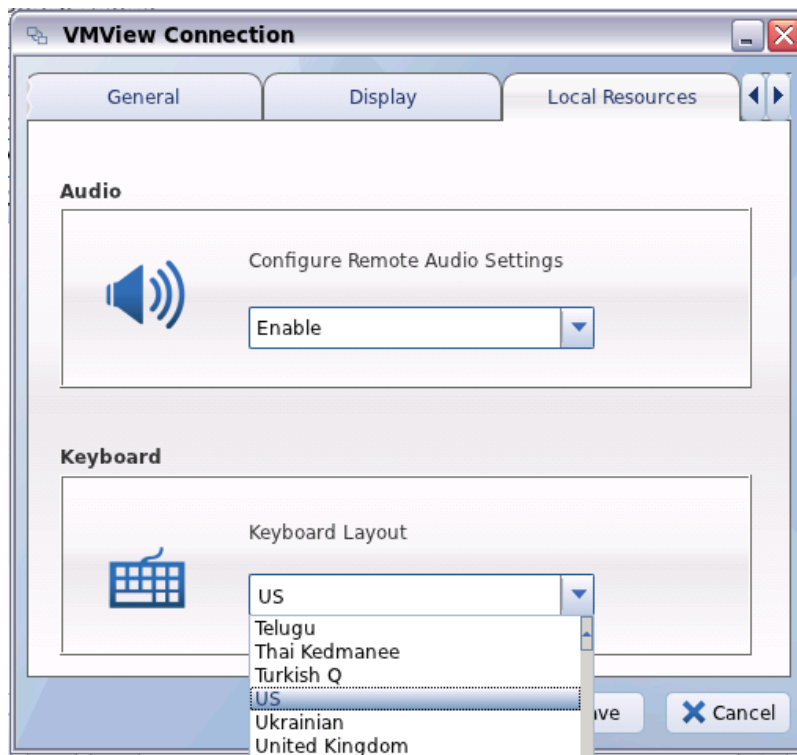


Display: The Setting on this tab allows you to configure the display area of the VMware view client, as full screen or customized resolution.



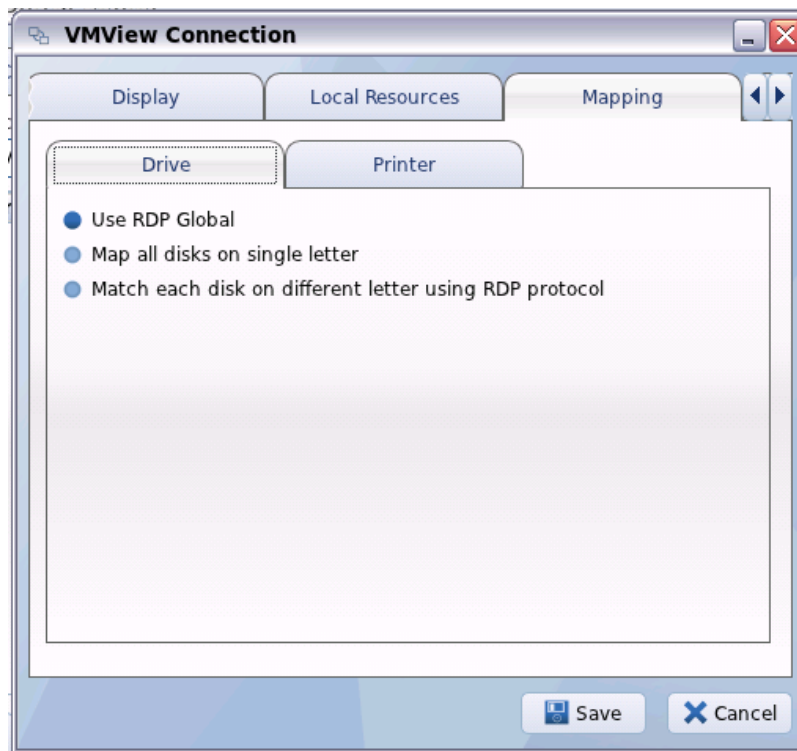
Local Resources: User can set the Keyboard Layouts and map key bindings.

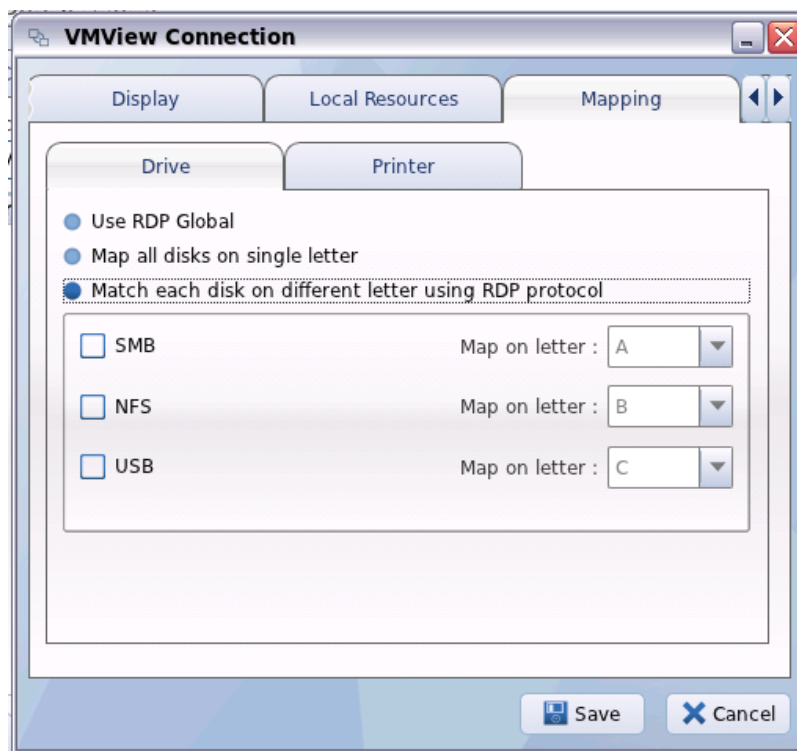
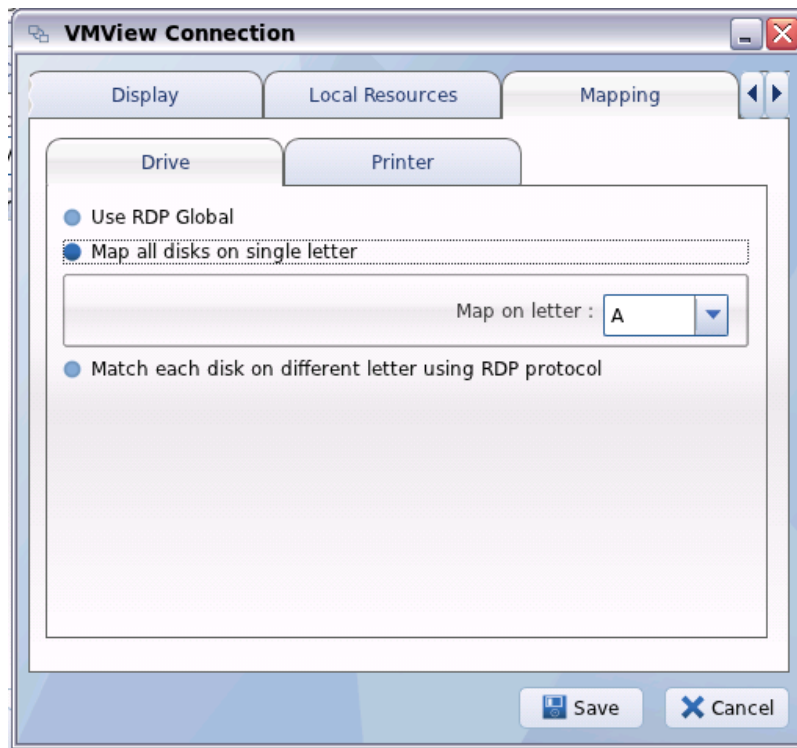




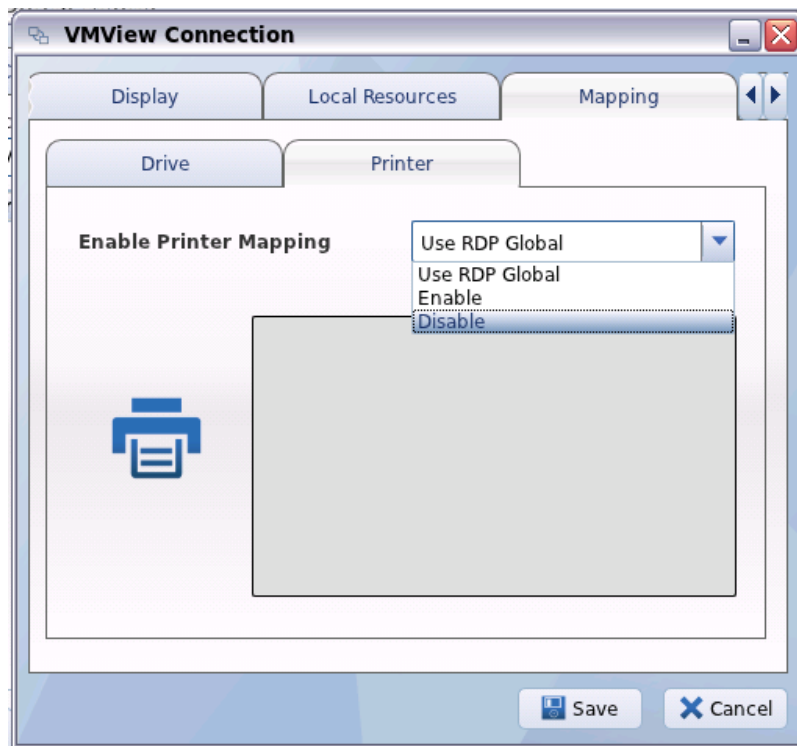
Mapping: Drive

User can assign different characters for mapping of different disks and assign single character for all disks in this tab. Local storage (SMB, NFS, and Local USB) should be mounted in RDP session with single or different assigned letters.



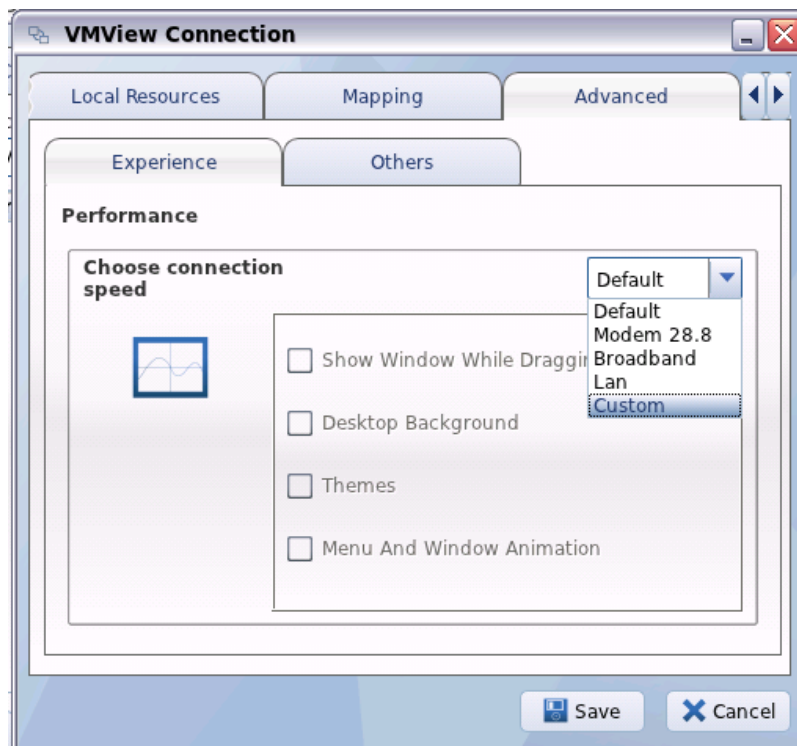


Printer: To use printer, enable this option. After this setting, the printer will be redirected in the RDP session. Applications running within a remote desktop session can print to a printer attached to the client device. To redirect more than one printer, select the appropriate printer from the available added printer list. Disable the printer mapping option, if user does not want to redirect the connected printer.



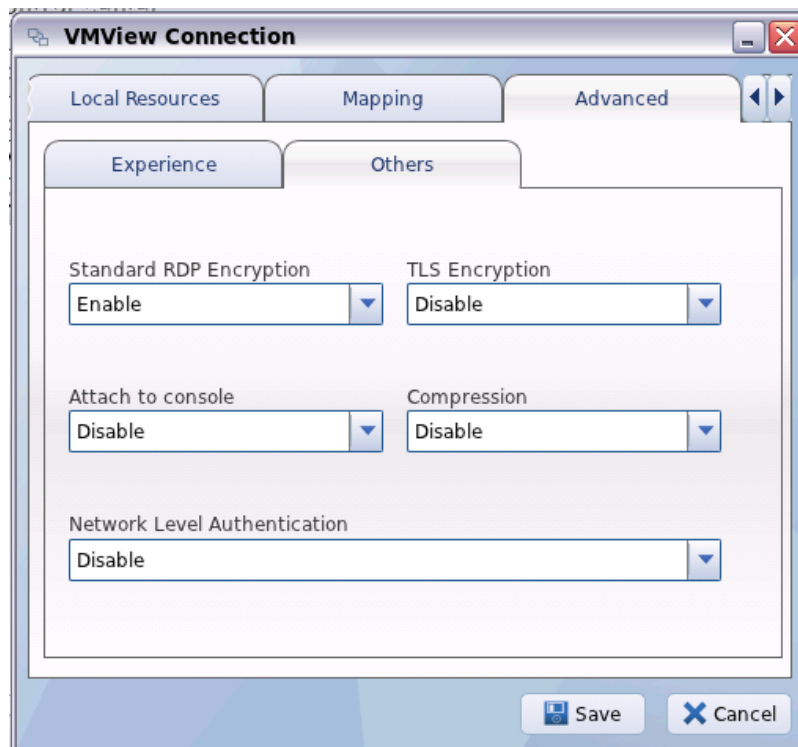
Advanced – Experience:

The settings on this tab allow you to disable certain features to improve performance or enable features to improve the appearance of the remote desktop. As indicated, select your connection speed to optimize performance.



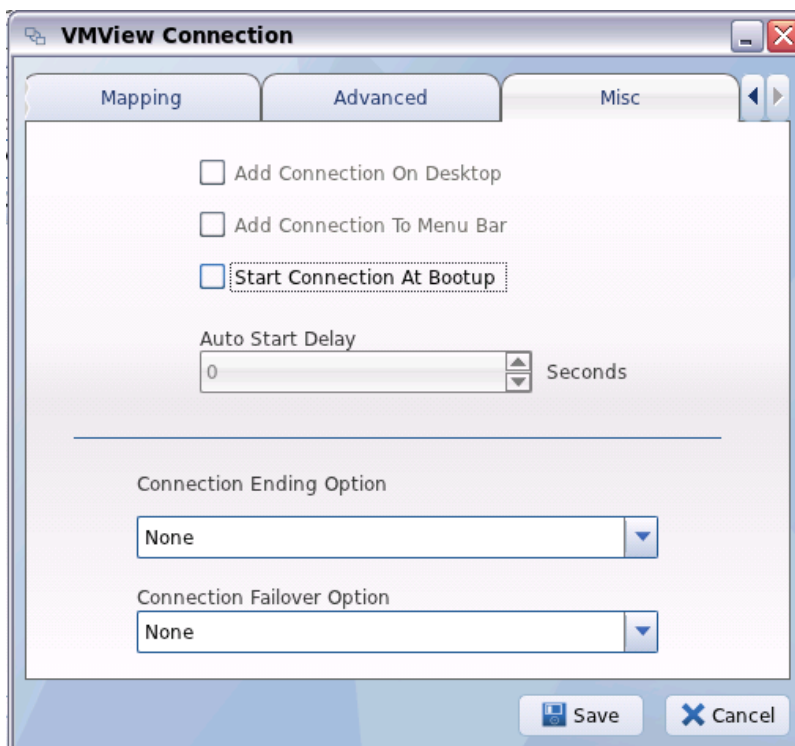
Advanced - Others:

The settings on this tab allow you to configure features such as Encryption, RDP Protocol Version etc. of RDP protocol.



Misc:

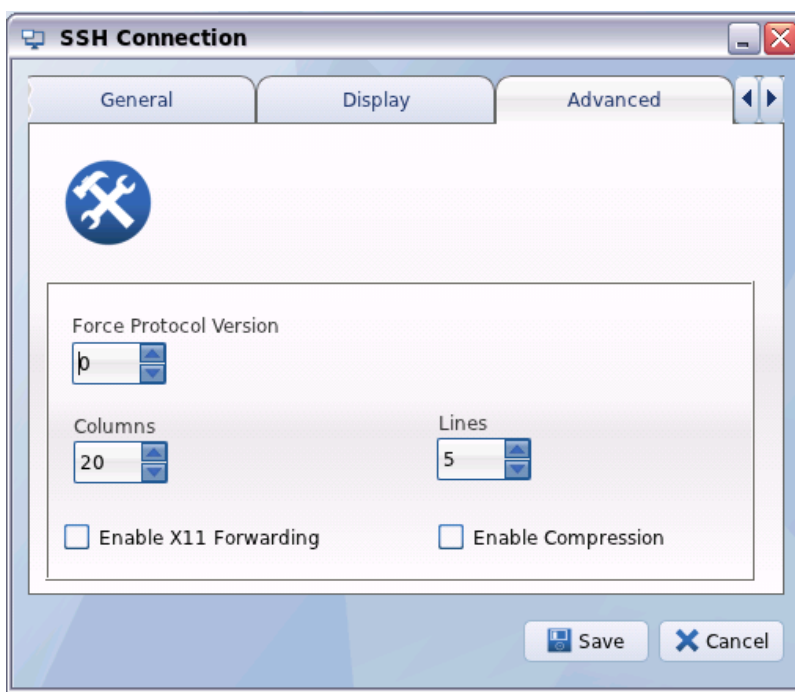
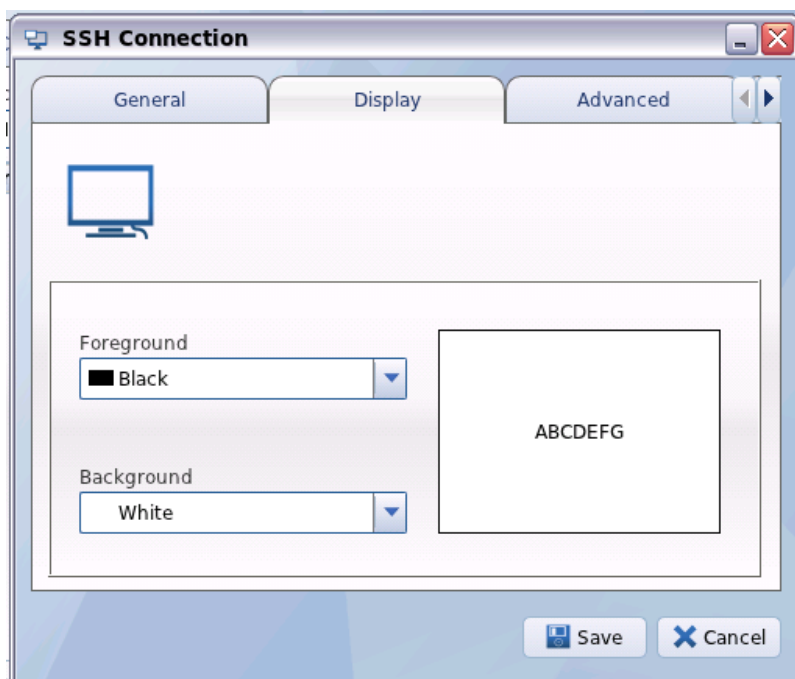
The settings on this tab allow you to configure miscellaneous features for connection.

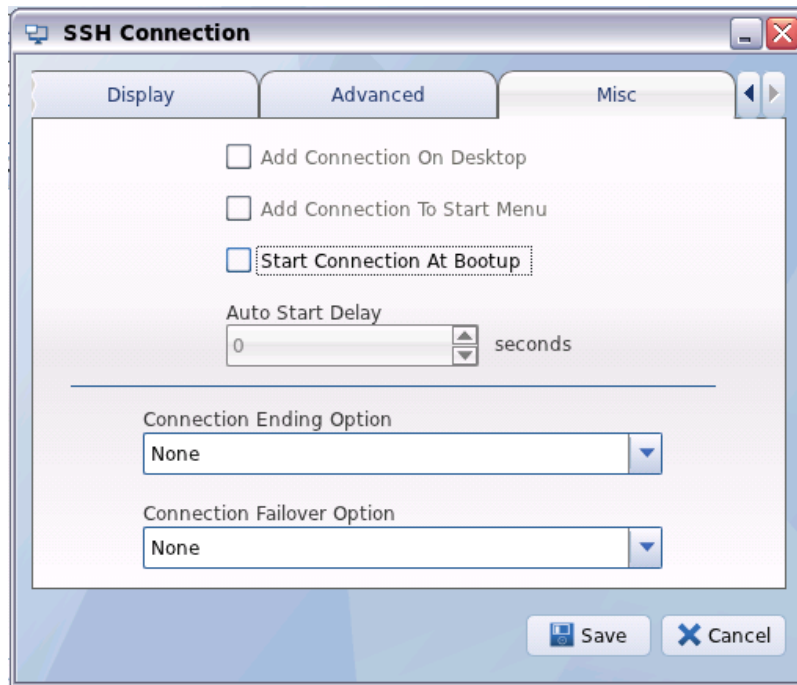


5.8 Adding a SSH Connection

SSH (Secure Shell) Protocol Connection is to take console based session of any Linux Machine.





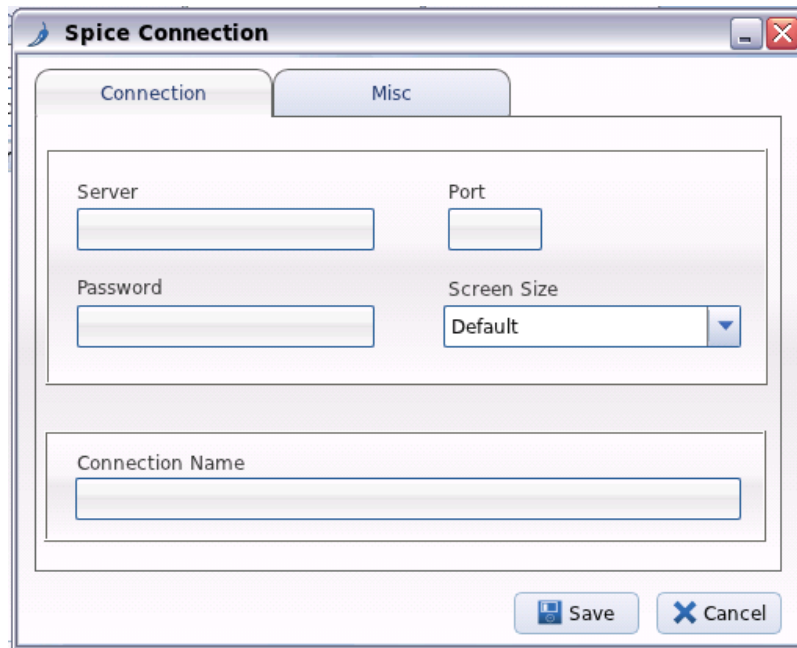


5.9 Adding a Spice Connection

SPICE (the **Simple Protocol for Independent Computing Environments**) is a remote-display system built for virtual environments which allows users to view a computing "desktop" environment - not only on its computer-server machine, but also from anywhere on the Internet and using a wide variety of machine architectures.

General:

- Select connection type as 'Spice'.
- Input server IP address manually.
- Input Password and Port.
- Select Screen Size from drop down box, by default "Default" is selected
- Input Connection name.



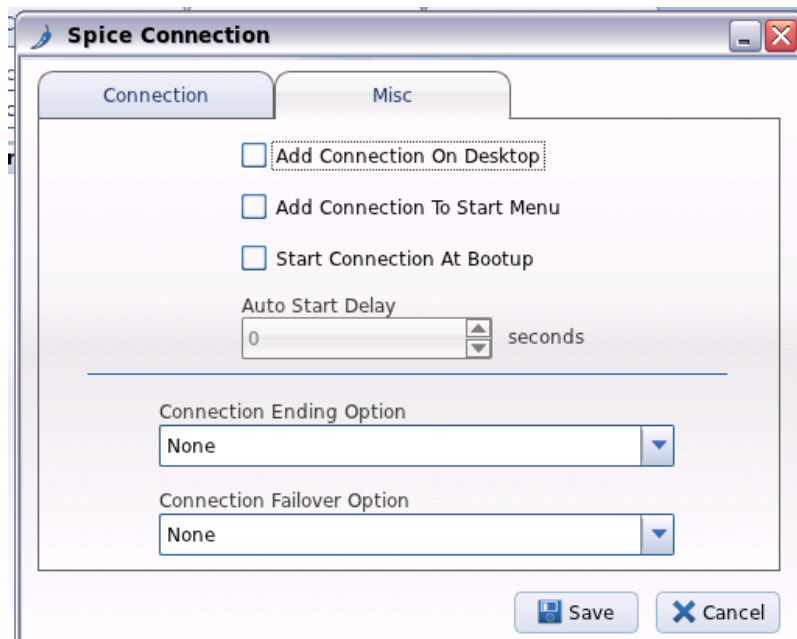
The image shows the 'Spice Connection' dialog box with the 'Misc' tab selected. The 'Connection' tab is also visible. The 'Misc' tab contains the following fields:

- Server:** A text input field.
- Port:** A text input field.
- Password:** A text input field.
- Screen Size:** A dropdown menu with 'Default' selected.
- Connection Name:** A text input field.

At the bottom right, there are 'Save' and 'Cancel' buttons.

Misc:

The settings on this tab allow you to configure miscellaneous features for connection.



The image shows the 'Spice Connection' dialog box with the 'Misc' tab selected. The 'Connection' tab is also visible. The 'Misc' tab contains the following fields:

- Add Connection On Desktop:** A checkbox.
- Add Connection To Start Menu:** A checkbox.
- Start Connection At Bootup:** A checkbox.
- Auto Start Delay:** A spin box set to 0, followed by the text 'seconds'.
- Connection Ending Option:** A dropdown menu with 'None' selected.
- Connection Failover Option:** A dropdown menu with 'None' selected.

At the bottom right, there are 'Save' and 'Cancel' buttons.

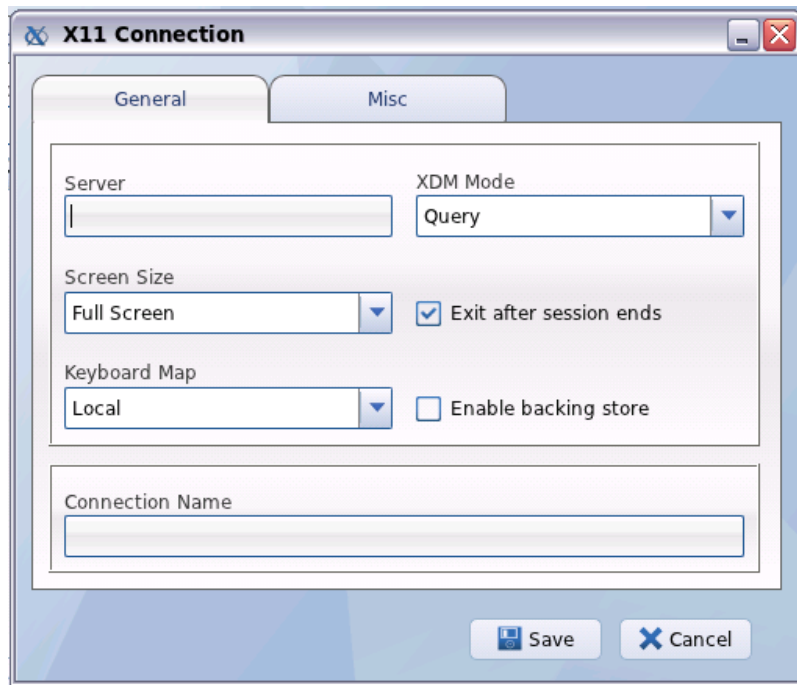
5.10 Adding a X11 Connection

X11 is a network protocol designed for Linux and similar operating systems to enable remote graphical access of Linux server to thin clients.

General :

- Select connection type as 'X11'.
- Input connection name.

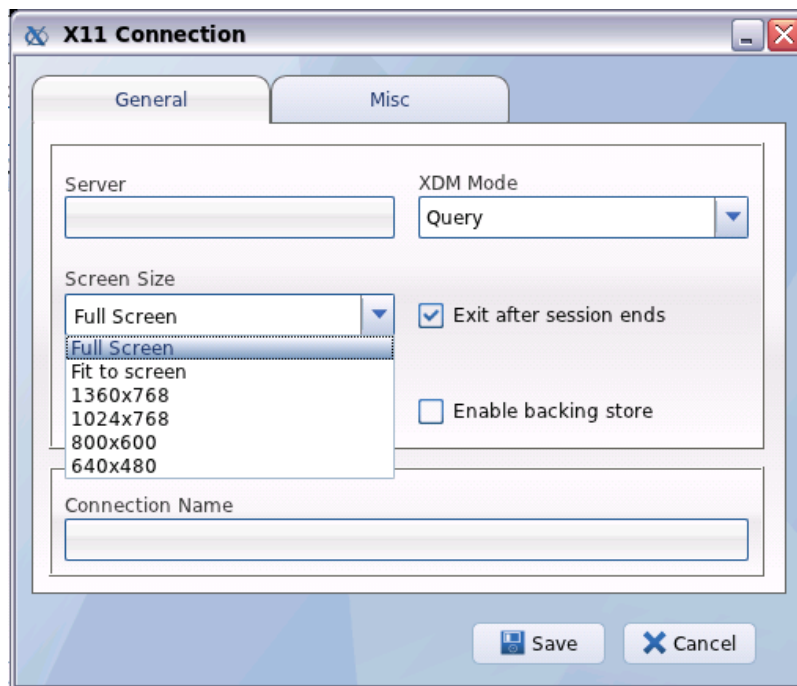
- Enter Server IP to which Connection is to be added.
- Select XDM Mode (Query/ Indirect/ Broadcast/ Chooser).



Types of XDM modes :



- User can select Screen size from the drop down list. Now the session will appear in the selected size.

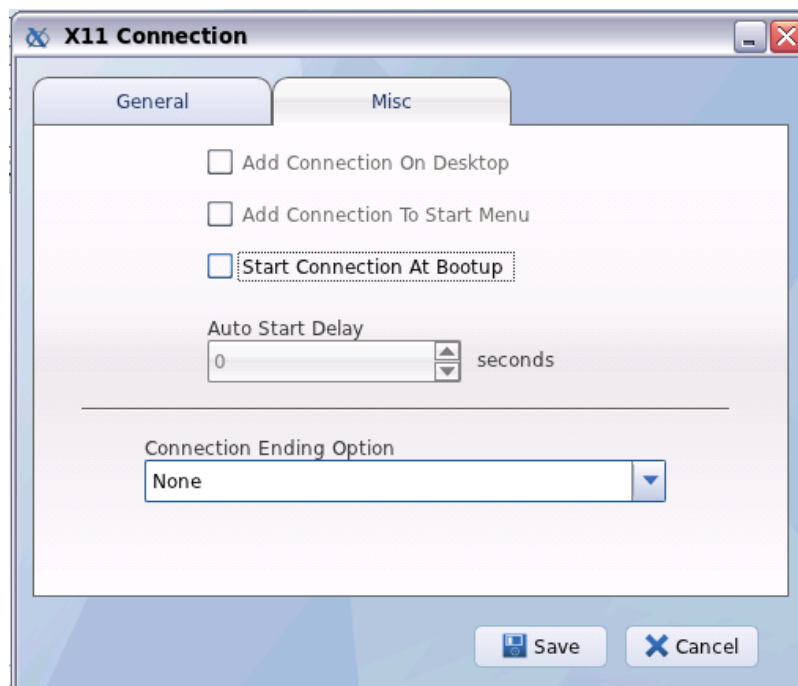


- Select Keyboard map (Local/ server) and configure Backing Store settings..



Misc :

The settings on this tab allow you to configure miscellaneous features for connection.



Common settings of Connection Manager

5.11 Editing a connection

To edit an existing connection settings

1. Select that connection which you want to edit.
2. Click on edit button.
3. Edit the contents (user are not allowed to change connection name and type).
4. Click on OK.

5.12 Deleting a connection

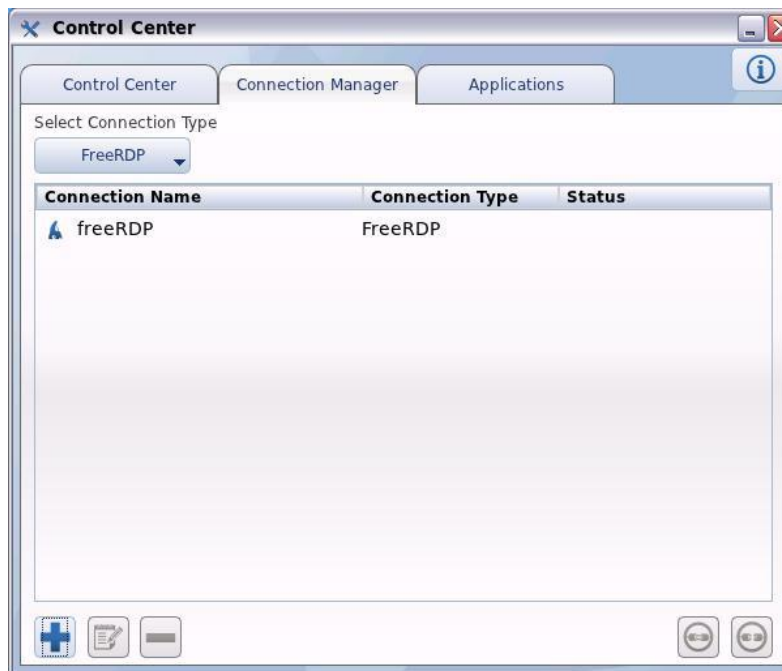
To delete an existing connection

1. Select a connection to be deleted from list area.
2. Click on Delete button.

5.13 Establishing a connection

To establish a connection in list area

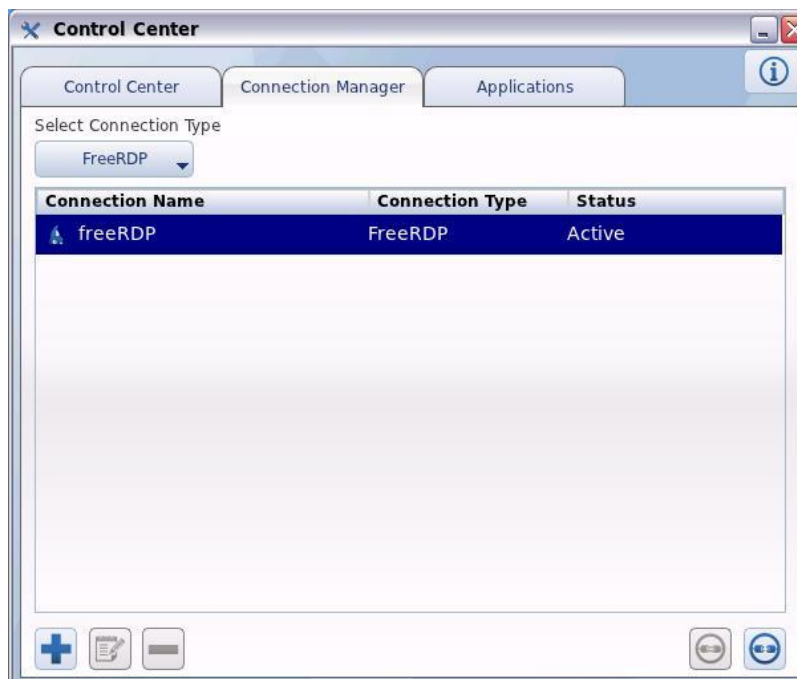
1. Select a connection from list area.
2. Click on connect button.



5.14 Disconnecting an active connection

To disconnect a active connection

1. Select a connection to be disconnected.
2. Click on Disconnect button.



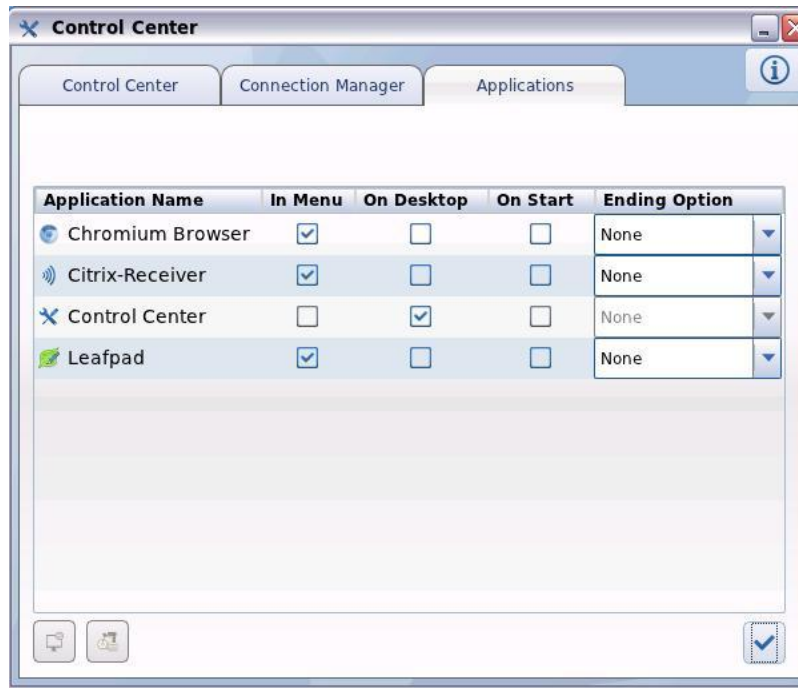
Following are some common settings for all connections:

- **Failover connection:** If any other connections are added like RDP, X11 etc will be listed in the failover connection list. User can select a connection which will be invoked if connection you are trying to invoke fails to establish successfully.
- **Connection ending option:** User can select an operation to be performed by image after termination of the connection i.e. None, Shutdown the image or Reconnect to the connection.
- **Automatic Start:** This check box allows user to enable or disable automatic start of the connection (Very useful if user don't want user to access other feature of the system).
If this option is enabled then whenever user boots the system, it will be connected to the session automatically.
- **Add to menu:** if this option is enabled then a shortcut for created ICA connections will appear in the Start Menu (Useful only in desktop mode).
- **Add to desktop:** if this option is enabled then a shortcut for created ICA connections will appear on the Desktop (Useful only in desktop mode).

6. Local Applications

6.1 Citrix-Receiver

Citrix Receiver is the client to connect Citrix Server and then to XEN Desktops. Here we can access the published applications. To invoke Citrix-Receiver double click on Citrix-Receiver application.



6.2 Leafpad

A **text editor** is a type of program used for editing plain text files.

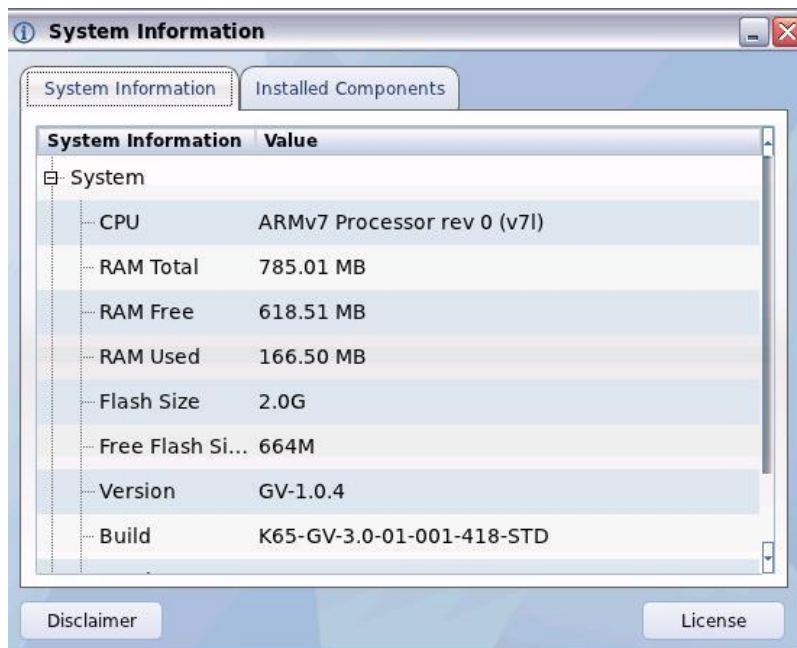
6.3 Chromium Browser

Chromium is an open-source browser project that aims to build a safer, faster, and more stable way for all Internet users to experience the web.

7. System Information

7.1 System-Information

System Information shows details about your computer's hardware configuration, computer components, and software, including drivers.



7.2 Installed-Components

